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The lectures of the 1951 conference developed the idea of mass communication as a process of reading. Three articles in this yearbook discuss this concept in terms of "discriminative reactions" to reading. The newspaper, television, radio, and other current means for mass communication are analyzed in view of their reading requirements. Discussion is also given to children's abilities and the specific reading problems and solutions for handicapped children. Emphasis is placed on the importance of developing techniques and procedures which make reading instruction more effective. Although some of these articles were not read before the conference, all of them represent phases of reading development which were considered by the participants.

CLAREMONT COLLEGE READING CONFERENCE

Sixteenth Yearbook

1951

CONFERENCE THEME

Mass Communication:

A Reading Process

*Jointly sponsored by CLAREMONT COLLEGE and
ALPHA IOTA CHAPTER of PI LAMBDA THETA*

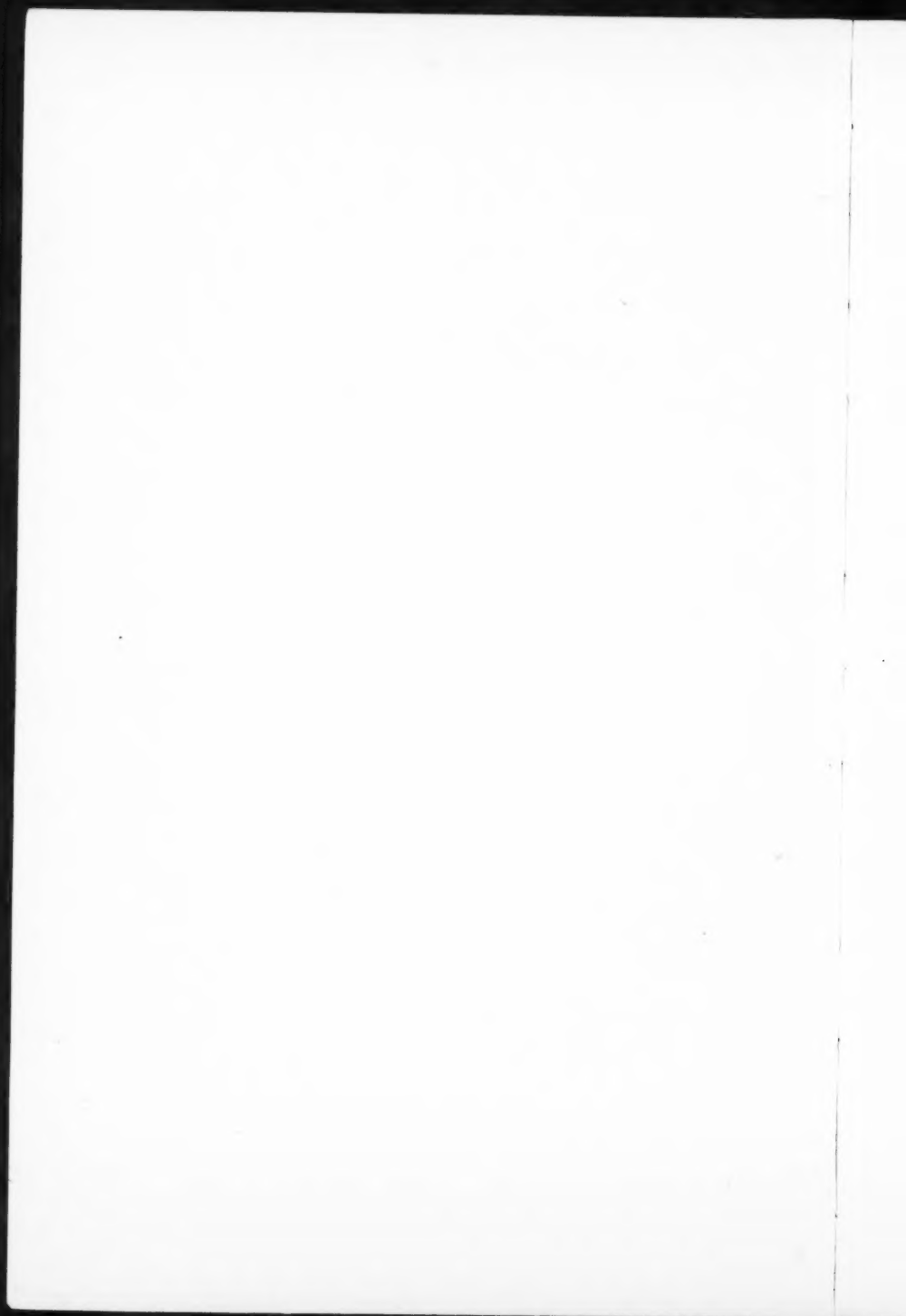


CLAREMONT COLLEGE CURRICULUM LABORATORY
CLAREMONT, CALIFORNIA

1951

Claremont College Reading Conference

Sixteenth Yearbook 1951



Introduction

In the summer of 1932 Claremont College Annual Reading Conference was initiated. The purpose of the conference is to assist in the development of better programs for reading instruction. In order to accomplish this purpose the conference programs have characteristically treated reading as being a process which is applied with all sorts of stimuli. Reading, as this conference conceives it, is not confined merely to reacting to printed words, or even to symbols in general. The basic definition of the reading process which each conference session explores is, "*reading is the process of making discriminative reactions.*" Each conference session is developed about a particular theme which expands and applies that basic concept. The theme for the nineteenth annual session (1951) is "Mass Communication: a reading process."

Three articles in this yearbook develop that theme specifically from the point of view of the Claremont conference. Mrs. Juneman presents and amplifies the general concept of the reading process which the conference espouses. Miss Carpenter and Mr. Spencer illustrate more specifically how the broad concept of the reading process implements the task of "mass communication." Drs. Strang, DeBoer, and Witty discuss the impact of television, radio, and other modern means for communication which supplement and to some extent challenge the more traditional "book reading." Dr. Kirsch considers more specifically the place of the newspaper in mass communication.

The broad concept which this conference uses suggests that other matters as well as printed words need to be read. Previous conferences and yearbooks developed therefrom have defined the task of reading as being that of effectively "reading oneself, other people, and things which activate human behavior." Human relations are powerfully influenced by the ways in which participants read each other and by the things that readers hold in high regard. Dr. Taba and Miss Simmons present reports of projects which were designed to develop better

readers of people and of the behavior of one's peers. Mrs. Brydegaard follows with an illustration of a somewhat different application of the reading process. Her pupils learned to read marijuana and to read its effects upon those who use it. That this is an important application of reading few will question. Mr. Shepherd presents still another use of the reading process, viz.; reading the nature of lighting and its effects on other reading acts.

Book reading is important and the development of techniques and procedures which make instruction in that regard more effective are primary concerns of this conference. Articles authored by Fargo, Friedman, and Weiss, and by Mrs. Wiede, respectively present procedures which have proven helpful in developing more effective instruction in book reading.

The concept of the reading process which this conference accepts includes the data from all sensory processes as stimuli for reading. Aural reading, i. e., reading sound stimuli, is an extremely important application of the basic reading process. Halldora Sigurdson's presentation before the aural reading section of the conference is reported in the yearbook. It shows how aurally handicapped children are aided in their reading of sound used in mass communication.

This is the sixteenth volume of the series of yearbooks that has been developed in conjunction with the annual reading conference sessions. Not all of the articles included in the yearbooks have been presented before the conference sessions. All articles, however, represent phases of reading development which are considered on the conference programs. Considerable progress has been noted in recent years toward broadening the treatment of reading in school instruction. We hope that this yearbook series may continue to assist in that regard.

The Claremont Concept of Reading

HELEN JUNEMAN

*Coordinator, Office of County Superintendent of Schools,
Los Angeles, California*

Question

What is the "Claremont Concept of Reading"? Isn't reading just reading? Doesn't everyone think of reading as reading the printed page?

Answer

"Reading is the process of making discriminative responses."¹ Such a definition of reading is unique and because of the breadth of this definition, this conference, the Claremont College Reading Conference, is outstanding among reading conferences in our country. Dr. William Gray, director of the reading conference held annually at Chicago University, has said, "It differs from most, if not all, of the others in the breadth of the conception of reading which it has consistently developed. It is a conference with a unique message and one of great significance in the education of boys and girls for effective living." The label, "Claremont Concept of Reading," in no way limits it to Claremont geographically, for the concept represents a truth of universal scope. This concept has been developed and sponsored by the Claremont College Reading Conferences and Yearbooks.

Question

"Reading is the process of making discriminative responses" is a unique concept. Just what kind of a process is it? When you say "making discriminative responses," just what do you mean? I am continuously making responses, would you say I am reading?

Answer

Reading is a process, *the* process of adapting behavior. As you and I react to, or are activated by any stimulus regardless of the sensory ability through which we perceive this stimulus, we are reading. The degree to which we adapt our behavior or discriminatively respond to

¹Spencer, Peter L., "Reading Things." *Claremont College Reading Conference, Twelfth Yearbook*, 1947, p. 22.

the particular stimulus or stimuli is the degree to which we read—read well or read poorly. The better you and I adapt our behavior to the occasion or situation, the better we are reading. So when you are responding, to whatever stimulus it might be, you are reading. But let us remember that merely receiving the stimulus is not enough; you must respond, and as you respond with more and more discrimination, your behavior is better and better adapted to the occasion.

Question

Does this reading process ever end, ever become finished?

Answer

Reading is a continuous process; it begins when life begins and ends only when life ends. In order to live effectively, in order to be happy, successful individuals, in order to be worthy citizens of a democracy we must continue to improve our reading and to extend it to more and more fields. "There are so many things to be read, and they must be read so many different ways that we must select the things we shall endeavor to learn to read well. But life will be more stimulating and fruitful if we do not choose too narrowly the things we propose to read."²

Question

You talked about multi-sensory abilities. I think most of us have felt that we read with our eyes. I am beginning to realize that I use more than the visual sense, but will you explain what you mean by reading through the many senses?

Answer

Maybe a few illustrations will help. The little baby soon learns to read his mother's voice through his auditory sense. We call that AURAL reading. The blind man reads his location on the street through his auditory and olfactory senses. He can tell whether he is at the intersection or in a well built block by the sounds. He can tell whether he is passing a bank, yardage store, bakery, or post office by the odors. We can call this AURAL and OLFACTORY reading. The well-versed diplomat reads the situation through reading the expressions on the faces, the gestures of the people, the setting and background of the occasion, the tones of voices, and the spoken words. He is calling into

²Ibid. p. 22.

play many of his sensory abilities and reading many abstractions and a much more complex situation than the baby and blind man. Thus we see that reading is the process of making discriminative responses and that all the senses are used in the reading process. As we see, we respond; as we hear, we respond; as we feel, smell, taste, we respond. When we sit down to dinner, we read that meal in many ways. We read the delicious odors; we read the attractive colors and arrangements; we read the delightful tastes; and we read the comments and remarks made about the food. Our behavior at the dinner table is affected by our OLFACTORY, GUSTATORY, VISUAL, and AUDITORY reading.

Question

Then reading takes in much more than books or the printed word?

Answer

Yes, and that is the difference between the commonly accepted concept of reading and the concept as developed by this conference. Reading is commonly referred to as being a reaction to one stimulus only—the printed word, but as we are developing it, it is the same process regardless of what type of stimuli activates it. As we interact with our environment, regardless of the stimuli which activate us and with whatever senses we gain perception, we are reading. If our behavior is well suited to the occasion, we have read well. From this we see that everyone reads—everyone does not read all things equally well nor does everyone read the same thing with uniform effectiveness. And the reason for this is that we do not all use our senses equally well or to the same degree. Of course, it could also mean that the sense may be impaired in some way. We do not read the same thing with equal effectiveness partially because we have not had the same kind or amount of experience.

Question

This concept of reading should certainly give me greater understanding and appreciation of my students and their abilities. But just how am I going to apply all this to the printed word, because I DO have to teach the students to respond to that stimulus.

Answer

We must constantly keep in mind that these printed words and all other symbols are not ideas, are not the things themselves. They merely

represent, or stand for, or symbolize these ideas and things. In order for the reader to react discriminatively to the printed-word stimulus, he must bring meaning to it. No matter how hard he tries, he cannot extract meaning from it. The printed symbol is a bunch of marks, and society has agreed that by bringing certain marks together we can create a symbol that stands for something. But unless the reader has experience, even though limited, he can certainly take no meaning away from those marks. For example, a child will get no meaning from the printed word "cat" unless he has experienced a cat or a picture of one. As he feeds the cat and plays with the cat, he will bring more meaning to the printed-word symbol, "cat." As he sees many cats, different sizes, colors, and kinds, he will bring even more meaning to the symbol. As he experiences the symbol "cat" being used in various ways, he will be able to bring meaning to the symbol when it represents an abstraction such as: "She is a cat"; "That's a catty thing to do." As another example, a child may know the printed-word symbol "blue" when it stands for the color. He may read with understanding such phrases as: "blue boat," "blue suit or sweater," and "blue skies." But imagine his confusion when he reads, "she feels blue." To understand this it will take much experience with the concept of "blue."

Question

How does he get this meaning which he must bring to the printed-word symbols in order to understand them?

Answer

He gets the meaning through experience, many and all kinds of experiences. Let's think of the order of development or the way we arrive at printed or spoken word symbols. First, there is the thing itself, and this thing might be an object, person, process, or relationship. Then we have ideas about these things. Lastly, society creates and accepts symbols which stand for the ideas about the things themselves. The symbol is in no way the idea. It is only as we have experience with the thing itself that we can bring meaning to the symbol. Let's go back to the cat. As the child saw only one cat or only a picture of a cat, he brought a most limited meaning to the printed-word symbol, "cat." As he played with, fed, and fondled the cat, he brought more meaning to the printed-word symbol. As this experience extended to more cats in kind, number, and color, he again brought more extensive meaning to the printed-word symbol. As he has experience with the concept, he can bring meaning to the abstraction. It is imperative that teachers

realize that just being able to say the word that appears on the printed page in no way implies that there is meaning and understanding—or any real reading.

Question

The words "primary" and "secondary" are used so much in explaining this concept of reading. Do these terms refer to grades?

Answer

No, they do not refer to school grades at all. The interaction of the individual with the things themselves—relationships, objects, processes, and people—is "PRIMARY" reading. "SECONDARY" reading is the reading of symbols which stand for the things themselves. "Secondary" emerges from "primary" as we have seen with the youngster reading the symbol "cat," and being able to move more and more into abstracting. "Primary" and "secondary" are really a matter of degree, but when one considers them at their great opposites, there is much difference. "Primary" is reading the thing itself, experiencing, and "secondary" moves more and more into abstracting. As we do more "primary" reading, we do better "secondary" reading. Consider the amount of experience necessary before one can read such abstractions as truth, honesty, and democracy.

Question

Can one be doing "primary" reading and "secondary" reading at the same time?

Answer

All of us are doing both "primary" and "secondary" reading. All of us are leading a rich enough life that we are each day experiencing new things, doing "primary" reading. And because we have done much "primary" reading along certain lines particularly, we are able to bring a wealth of meaning to those symbols, or do good "secondary" reading. The teacher must realize that because his students are individuals with different backgrounds and experiences, they read the same symbols differently.

Question

Because of our individual differences, do we read different things in different ways?

Answer

Yes, we do. And while the reading of the spoken and printed word

is very important in our society, we must never lose sight of the need and ability to read other stimuli. We all know the value of being able to read people, sounds, movements, weather, and the like. Whatever function the reading process is to perform, identifies the reading. Social reading has for its content people, their gestures, mannerisms, posture, walk, clothes. Thing reading has for its content motors, engines, and various objects. Personal reading involves oneself and one's relations to others. Reading life round about us involves reading animals, the skies, the weather, the roadside, the rocks, and such. Can we honestly say that the child who can identify planes as they soar overhead, the make and year of automobiles as they speed by on the highway is not reading? We could go on with countless examples of people's abilities to read many things other than the printed word.

Question

Then this concept of reading should certainly help with so-called remedial cases in reading, should it not?

Answer

It certainly should. It should enable you to free the child from much frustration by showing him that there are some things he can read very well. By starting with what he can read well, for example, the engine in his car, he can be guided to extend the process to the printed word. And let us remember that readiness is an integral part of reading and should be part of the reading instruction program at all levels. Readiness is involved in "primary" reading; it is not confined to the beginning grades.

Question

Operating on this concept of reading, I really have no non-readers, do I?

Answer

In answer to that and in closing our discussion, may I again quote from a yearbook. "There are no non-readers but there are multitudes of readers who read poorly and with too little facility certain things which our way of life holds in high regard."³ This concept of reading with its great breadth and depth is certainly an answer to many of our problems today. If, as individuals, we could read better and understand that others are reading well in fields often unknown to us, we could do much toward better living the "good life."

³Ibid. p. 26.

The accompanying diagram may prove helpful in illustrating our concept of the nature and applications of the reading process. At the upper end of the diagram, the individual is represented. Surrounding the symbol of the individual is a collection of arrows pointing toward and away from that symbol. These depict stimulation by the environment and adaptive responding on the part of the individual. This is an interactive relationship. It is the essence of the process of "*making discriminative reactions*."

The term PRIMARY appears alongside of this part of the diagram. And, just below the diagram of the basic process is a row of arrows pointing in a common direction, viz.: toward the terms "things," "people," "processes," and "relationships." The arrows symbolize the idea that reading is directed toward sensing, interpreting, and adapting ones behavior with regard for: "people," including oneself and others; "things" other than people; "processes," such as behavior or developmental changes; and "relationships" among all such stimuli. Since many such stimuli express intrinsic clues to their identity and meaning, they are regarded as being "primary" stimuli and reading them is termed "primary reading."

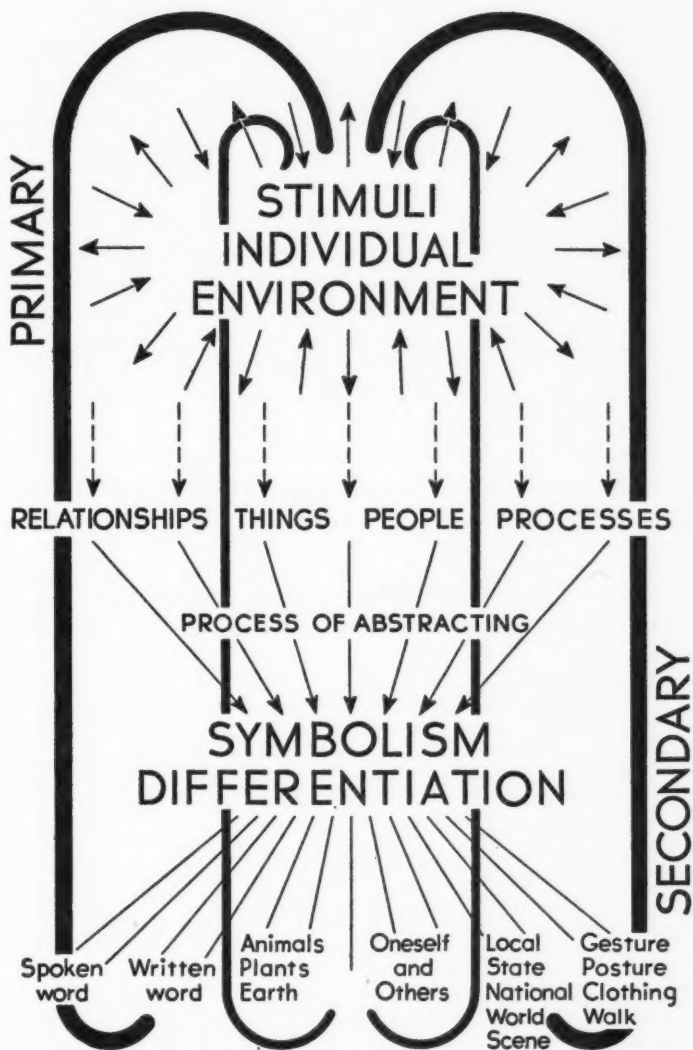
The arrows just below the middle of the diagram indicate a common general direction of change away from "primary reading" and toward symbolization thru a process of *abstracting*. At this level of refinement the reading process includes stimulation by means of more than the intrinsic characteristics of things, processes and relationships. Signs, symbols, and personalized meanings are now prominent in the reading behavior. Since meanings are personal things and are only in a very limited sense intrinsic properties of objective stimuli, the process of deriving meaning is one of ABstracting rather than one of EXtracting. The dependence upon symbolism and personal qualities of memory introduces the necessity for the reader to have had previous and recallable experiences with the symbols and the things symbolized. This surely differs from primary or first-hand, direct experiencing. Therefore, it is called "secondary reading," i.e. derived or dependent reading. The term "secondary" is presented along the lower right-hand side of the diagram to designate that distinction.

The reading process is intrinsically the same no matter what senses are involved in its stimulation. However, efficiency with the use of the process requires that it be adapted and implemented to serve more effectively particular needs. For example, reading spoken words

involves somewhat different skills, techniques, and sensory equipment than does reading printed words. Reading animals, plants, features of the earth, etc., is likewise substantially different from reading symbols pertaining to such things. As we differentiate among the many things of concern, we learn what to observe and how to observe each of them. Hence, there are many types in the application of the basic reading process.

Finally, the reading process is continually characteristic of human behavior. This is depicted in the diagram by the lines extending vertically thru it. Reading is not a static thing. It is a sequential and continuous process. For example, abilities to read symbolic expressions are developed thru the reading of things which the expressions symbolize, but, on the other hand, abilities to read symbolic expressions in turn affect abilities to read the things symbolized. Human behavior is a continuous manifestation of abilities with reading, i.e. making discriminative, adaptive reactions.*

*Editor's Note: Mrs. Juneman developed the diagram as a series of overlays which were designed to show the sequence of its message. The discussion of the chart was added to her article because the expense of publishing the overlays was prohibitive. The charts have been extensively used in supervisory conferences where better reading instruction is being planned.



Mass Communication: A Reading Process

BERNICE CARPENTER

*Teacher of English, Monrovia-Arcadia-Duarte High School
General Session Speaker, Reading Conference*

Question: Through what media are the conflicts in the world today being communicated to us?

Answer: The theme of the nineteenth Claremont Reading Conference is "Mass Communication: a Reading Process." Such a title cannot help but be confusing to those people who think exclusively of reading in terms of abilities to read printed words. Let us look for a moment at methods of the transmission of ideas in the past.

In early days communication between peoples was slow and difficult. Mountains, deserts, oceans, rivers formed almost complete barriers to interchange of ideas. People communicated with each other in their own small areas by gestures, by touch, by pictures, and by primitive sounds. Drums relayed messages for long distances through jungle territory. Smoke signals told to those who could read them their tale of victory over the enemy. Stones, sticks patterned in a certain manner recounted incidents to those coming after. Cliff dwellers left in their primitive pictures stories of floods, disease, and conflict with other tribes. Ideas of good-will were communicated by means of the extended palm, the clasp of hands, an encouraging touch on the shoulder. Ideas of hatred were transmitted by a shaking of the fist, by hurling sounds, stones, and weapons at the hated one. After sounds developed into what we call language, the printed word brought millions of people all over the world opportunities of communication. Through printed symbols people thousands of miles apart could disseminate their own ideas. Furthermore, they could sit quietly in their own homes and interpret meanings in the minds of people who lived on the other side of the world! Modern technological communication systems have increased in such numbers and efficiency that words can now be shipped and flashed on screens around the world. Movies, radio, television may offer real competition with the media of books, magazines, and newspapers, or they may become supplemental aids of great importance.

Television as a medium of communication has the additional appeal

of being timely and on the spot. Presumably over thirty million people saw the television reports of MacArthur's return from Japan. There has been nothing comparable to this in the use of the printed word. The power to influence the people of the world by means of the combination of the pictorial with sound, movement, gesture, and words is so important that it must, of course, be evaluated by every teacher. A communication which reaches millions has potentialities far beyond the influence of books. We live in an era shaped and to some extent created by unparalleled language influences. We are constantly being talked at by public address systems; soft drinks, soap chips, toothpastes pursue us wherever we go—thanks to radio and television. Mass circulation of newspapers and magazines reflect the prejudices and obsessions of their owners all around the globe; daily we listen to radio programs almost completely dominated by commercial motives. We shudder when we think that Hitler through the medium of the radio was able to conquer Austria and we wonder what is in store for the world.

Can this Claremont concept of reading that has been explained help to bring harmony out of the chaos brought about by the confusion of verbal symbols with realities which we find all about us today? Is printed word reading sufficient to produce an educated individual and are abilities to read printed words possible of development without support from other comparably fundamental applications of the reading process?

Question: What meaning does the individual bring to the world conflicts that he sees around him in the world today?

Answer: If mass communication is a reading process, then according to the Claremont concept of reading the emphasis is shifted away from the stimulus and is placed upon the characteristics of the behavior of the individual—the process of making discriminating reactions to all stimuli and not just reactions to the printed page. Social communication is facilitated or hindered by the experience each person brings to the situation.

What meaning do we bring to the conflicting ideologies all about us in the world today? Let us use for an illustration the recent dismissal of MacArthur. How did you read that situation? What experience did you bring to the incident that was the determining factor in your interpretation of the situation? How did the vast number of people in the world read this event? Did they read it as the small boy

reads the symbol "cat" and interprets it from knowing *one* cat? As the boy who brings the meaning, the concrete images of *many* cats? As a person who has background experience sufficient to understand the term "catty person"? As a person who brings wide imaginative understanding of abstractions to the words "The fog came in on little cat feet"?

Let us look into the background experience of the thirty million television observers, watching and listening to the MacArthur arrival. There was, of course, present more than one man to whom MacArthur was a symbol of what his own sons or his neighbors' sons were experiencing in Korea or Japan. Such a man's comments indicated the way he read the situation by means of the limited experience he brought through the knowledge that came to him from his son's letters. A second man highly approves of the General because to him MacArthur is a symbol of power. Since to him real success in life is represented by the power a person holds over others, he reads the situation by his own personal lust for power. A woman watching the program weeps. Why? Perhaps because he is to her a symbol of patriotism. So she lauds him as she weeps in the light of her interpretation of the patriotic experience which she brings to the event. To an old army man MacArthur is a symbol of the experience of a rigorous army system, the details of which he knows well. To him MacArthur symbolizes the tradition of the good soldier who has survived successfully the army caste system. Another comment shows that a young man looks upon MacArthur as a person who can make no error. Why? Perhaps difficulties and frustrations in his own life have given him the need to have a material, a perfect god to worship as an ideal.

The accuracy then with which we read a situation depends to a large extent upon the breadth of our concrete experience, our accuracy and evaluation of inferred statements and judgments, and the quality of the imagination in interpreting highly abstract statements.

The person looking at television who has read widely from various types of magazines, world newspapers, books, who has friends in many countries, who attends lectures and listens to varying viewpoints, undoubtedly tries to read the MacArthur incident as an episode with causes and results which if intelligently read or evaluated can aid in a vastly more constructive approach to oriental conflicts.

Yes, the behavior of the people who witnessed this particular television program was adapted to what they sensed under stimulation. As we watched this behavior we may have pondered over the adequacy of

the teaching of reading of this type and wondered what the role of the teacher can be in the development of more vital concrete experience and the imaginative reading of symbols.

Question: How can we develop the power to behave discriminatively in the face of the conflict of opposing ideologies of today?

Answer: The answer to this question goes far beyond learning to read printed symbols. There need be no highly inflamed invectives hurled at people whose ideas differ from ours. We need to turn our attention as teachers to the development of techniques by which we can understand the background experience of each individual. Why does he act the way he does?

Hitler's method of communicating his ideas included: (1) directing all arguments to the least intelligent of his people; (2) avoiding scientific terminology as much as possible; (3) giving simple points unending repetition; (4) seeking always to hold the attention of the masses; (5) avoiding the many-sidedness of scientific thinking; (6) restating a few main points as slogans; (7) never altering an idea, for according to his ideas the masses will not retain changes in ideas; (8) never permitting the faintest idea of right on the other side; (9) things are either positive or negative, right or wrong; (10) always limiting the program and repeating it perpetually.

The Claremont concept of developing discriminating behavior demands of a teacher entirely different procedures. We as teachers must learn to ask ourselves such basic questions as the following: (1) not merely: What did he say? rather: Did what he say fit the life facts? (2) Words represent an infinity of meanings. This concept of reading about which we are thinking brings out the myth of the *one and only* meaning. We do not ask: What do I interpret his meaning to be? But we do ask: Does he use his terms as I think he does to refer to what I mean? (3) Has the speaker stated his approval as a *life fact* or as a *judgment*? (4) Am I aware of my own slants and biases because of personal experiences? Am I aware of the slants and biases of the speaker? (5) Do I have a sense of the problems and difficulties involved in making accurate statements about people and the world, or do I seek one answer and one answer only? (6) Do I have a sense of the maladjustments both personal and social that are rooted in the spoken and written symbols around us? Am I scientifically aware of the powers and limitations of symbols? Do I always remember that the symbol is not the thing symbolized, the word is not the person or

thing? (7) Do I always date my statements? Do I give the place? the viewpoint? (8) Am I aware of similarities in differences and differences in similarities? Do I discriminate *between* individuals rather than *against* individuals? (9) How well do I read myself, life, and other people? Do I read them with what is in my own mind? Do I know the signs of poor reading in the modern world: criticizing others, over-rating and under-rating others and yourself, self-consciousness, indecision, stubbornness, pessimism, moodiness, over-sensitive-ness, unreliability, emotionalism, irritating and nagging others?

Question: What is the effect of this concept of reading on educational procedure?

Answer: This concept of reading makes feasible an integrated approach to education. This concept of reading makes an important contribution to the curriculum of the modern school for what it does to the *inner processes* of the student, of the teacher, of the administrator, of the board member, of the parent and community member. This concept of reading aids one in seeing that the reading program of the school is a job for the whole school, for the whole community to work upon. This concept suggests a core program based on answering the question: What are you as a teacher going to do to develop growth in understanding a student and his needs? After understanding the student and his needs then let us use the subject matter to meet those needs. The purpose of the school curriculum then becomes the process of improving the ability of the student to behave discriminatively in his interpretation of the world about him. The printed word, radio, movies, television—all are symbols to be used, evaluated, so that the mass communication of ideas can become constructive.

As viewed by the people who planned this program, mass communication, therefore, is a process of reading. People express their ideas through the processes of speaking, writing, and behavior. All these processes must be read and read accurately. Hence, on the program of this conference recognition is given to visual reading, aural reading, and to tactile and kinesthetic reading. Reading is the process of making discriminative reactions. The basic tasks in developing abilities to read effectively are to learn to read one's self, other people, and those things which activate people's behavior. We hope that you will keep these ideas in mind as you participate in this conference and that you will go back to your communities to practice democratic reading procedures.

Mass Communication: A Reading Process

PETER L. SPENCER

*Professor of Education, Claremont College
Director of the Reading Conference*

The theme of this—the nineteenth session—of the annual series of Claremont Reading Conferences is "MASS COMMUNICATION: A READING PROCESS." For those who may not be thoroughly familiar with the basic thesis and the former programs of this Conference, that theme may be a bit confusing. However, it is our purpose to demonstrate and to develop its validity and its pertinency as our program progresses.

The term READING has become so characteristically associated with the recognition and the interpretation of printed words that thinking of it in any other relationship is sometimes difficult. However, it is worth noting that the restricted association must be of recent origin. History reveals that the printing of multiple copies of books or papers was made feasible by the invention of movable type only a little more than five hundred years ago. That event roughly corresponds with the discovery of America. It occurred hundreds of years after the great cultural periods of the Greek and Roman civilizations. Surely, there was reading being accomplished before books became so readily available! A series of technological inventions has made book printing a rapid and relatively inexpensive process. Books, magazines, newspapers, and other printed materials are now readily available to almost everyone in our country. It is difficult to realize that comparatively few years ago such materials were very rare and very expensive. Libraries with thousands of volumes are commonplace today. Relatively a few years ago no such thing existed.

That school instruction procedures would be drastically affected by such a development is a foregone conclusion. Printed words as a vehicle for communication have tremendous possibilities. Under favorable circumstances, they have the power to transmit messages over wide distances or over similarly wide intervals of time. Printed words appear almost to possess a magical quality which, throughout the ages, man has conceived in his imagination and has hoped to trap and to utilize for his own purposes. Putting things into print or seeing them expressed in print casts a powerful influence.

Consequently, we are not surprised to find that the first provision made for systematic and formal education of the children in colonial America was a provision for their instruction in the reading of printed words. Some three hundred years later—in 1951—that is still the primary concern of most of those who evaluate our schools. That it is likewise a concern in other lands and among other peoples is easily demonstrated. Dr. Frank Laubach and The Committee for Literacy have initiated programs in many lands to teach the people how to read printed words. The Office of the Coordinator of Interamerican Affairs instituted and supported projects for that purpose in most of the countries in Middle and South America. Schools now spend millions of dollars annually for textbooks and other printed materials. The manufacture of school texts is Big Business. All of this has developed following a series of technological inventions having to do with printing. The developments have been made largely for purpose of facilitating "MASS COMMUNICATION."

The tendency to think of education so exclusively in terms of abilities to read printed words has recently come into question. There is no desire to decry nor to discount the usefulness of such abilities. But, there is, we believe, justification for questioning whether printed word reading is sufficient to produce an educated individual, and whether abilities to read printed words are possible of development without support from other and comparably fundamental applications of the reading process.

Realistically we must recognize that in recent years technological inventions and developments comparable to those in the area of printing have occurred with other media for communication. Recording devices, the radio, the cinema, and more recently, television have all been developed and made available for MASS COMMUNICATION. In general, these processes utilize types of stimuli which are more readily sensed and understood than are printed words. Furthermore, the radio makes available through relatively inexpensive machines contact with the entire world while one sits at home or drives about the countryside. Printed words are not so facile a means for reaching the masses.

Radio audiences commonly number hundreds of thousands of readers. The cinema messages are likewise read by large audiences and over considerable periods of time. Television has an additional appeal by being timely and on the spot with its story. Millions of persons participated in reading the telecasts of the welcome for General Mac-

Arthur in New York City. A communication which simultaneously reaches millions of readers has potentialities well beyond the possibilities of books.

Under any reasonable concept of the process of reading, all such things are READ. Because these media represent such popular and such potentially powerful forms of mass communication, instruction in reading them must be supplied. The modern school must meet this new development, at least, as effectively as the former schools met the development of printing. A modern program for reading instruction may not be satisfied with doing well only the limited program of reading instruction which its predecessor provided.

The Claremont Reading Conference concept of the reading process makes the inclusion of such activities within the school's reading instruction program logical and functional. Their inclusion within programs based upon more customary and narrow concepts may not be so readily accomplished. The fundamental difference between what this conference proposes and what is commonly conceived as the reading program is easy to identify. The common provision for reading instruction conceives of reading as being merely the process by which people react with regard for PRINTED WORDS. *Therefore, the process is identified and its characteristics are determined by a particular stimulus.* Obviously, such a definition tends to make the reading process a separate and distinct mode of behavior which is called into action only through stimulation by means of printed words. Analyses of the nature of the process will be confined, therefore, to behavior with printed words.

The Claremont Reading Conference conception of the reading process *shifts the identification criteria away from the stimulus and to the characteristics of the behavior involved.* Two assumptions are made in support of this change. The first asserts that behavior is basically the same for responding under all manner of stimuli. The second asserts that development of better or more apt behavior will make it available for use with all types of stimuli.

Behavior activated by *printed* words, at least, insofar as the message communicated through the words is concerned does not differ from behavior activated by *spoken* words. The really fundamental phases of reading behavior are those which produce better adaptation on the reader's part. Hence, this conference defines reading as *the process of making discriminative reactions.* The term, discriminative, modifies the term, reaction, to signify that a stimulus situation has been sensed and

the behavioral responses have been adapted, i.e., controlled better to fit the demands of the situation as it has been interpreted. Both the situation as a stimulus and the behavior responses are read and subsequent behavior is influenced accordingly.

This is an attempt to identify the reading process by means of its intrinsic nature rather than in terms of any special stimulus. Such a procedure is, we believe, educationally valid and demonstrably fruitful. It discloses the essential sameness of all behavior processes no matter what their stimulus may be. It reveals further that the processes of learning, of perceiving, of behaving adaptively, and of reading are one and the same. Reading is not an academic school subject. However, school subjects can be identified with particular reading tasks. Reading is a native process comparable in every respect with other native processes such as nutrition or respiration, for example. What one reads and how effectively one reads it are products of developmental learning. These are the province of education. Producing them is the business of the reading instruction programs of the schools.

Man contacts his world by means of his sense receptors. While the receptors are provided by nature and are equipped with particularized sense modalities, their efficient use is largely a matter of learned behavior. Every sensory process may be used to identify a class of stimuli for man to read. Hence, on the programs of this conference, recognition is given to "visual reading," to "aural reading," to "tactile," and to "kinesthetic" reading, etc. Because of the variance among receptor organs, differing techniques for receiving the stimuli for reading must be developed. Moving one's eyes along a line of print as in visual reading represents a comparable adaptive behavior to that of moving one's fingers along a line of Braille printing as in tactile reading, but, doubtless neither of the movements occur wholly intuitively and, knowing one may not assure skill with the other.

In attempting communication, man expresses his ideas, his interests, his personality in many ways. Extreme dependence upon any one mode of expression is precarious. This condition is readily recognized in common observation. For example, we have an adage which states, "What you ARE speaks so loudly that I cannot hear what you SAY." This implies that the *person* in attempting to communicate is being read as an integral part of the message he attempts to express. In like manner, we observe that our behavior flavors our verbal statements. This is typified in the novel, *The Virginian*, when the hero admonishes the villain as follows, "When you call me that—smile." As a matter of fact

our courts of law very often function in this form of reading. The court must try to read *all of the evidence*, not merely the printed parts, in an attempt to determine the truth of the situation. That this reading is no mean task should be clear to everyone who tries to understand international relations in these days of double-talk and gobble-gook. The vehicles for transferring words across national boundaries were never before equalled, but one would be frightfully naive, if he read only the words that are so transferred.

As viewed by the planners of this conference, therefore, Mass Communication is a process of reading. From the processes of advertising, of dramatizing, of speaking, of writing, and above all of BEHAVING, people are expressing themselves, and their ideas. The processes are many fold and yet all are important and all must be read. A modern program of reading instruction must be very considerably broader and more inclusive than were programs when the media for communication were restricted. However, the basic truth of the thesis of the conference series is now more evident than ever. Reading is the process of making discriminative reactions and the basic tasks in developing abilities to read effectively are to learn to read one's self, to read other people, and to read those things which activate people's behavior. We hope that you will keep these ideas in mind as you participate in the conference session and as you go forth to practice in modern reading instruction.

Reading in This Age of Television, Radio, and Motion Pictures

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An extreme view of the effect of one of the mass media of communication was expressed by former Chancellor Hutchins of the University of Chicago: "Under the impact of television I can contemplate a time in America when people can neither read nor write, but will be no better than the lower forms of plant life." Is there any real justification for this statement? What detrimental effects do the mass media have upon reading? What are their possible beneficial effects?

Television, radio, and motion pictures may interfere with reading by using time that might otherwise be devoted to books, by getting people accustomed to a more effortless way of gaining information, and by furnishing little stimulus for systematic, critical, intensive thinking about a particular subject. Obviously the degree to which any of these adverse influences operate in a given case depends upon the quality of the programs to which the individual listens, the amount of time he spends, and what he gets out of the experience.

Certainly the mass media of communication often usurp time that might otherwise be spent in reading. Recent surveys of the time which children spend in looking at television reveal that this activity occupies a large part of their leisure. In one study, the average time spent per week was nineteen hours.¹ A few children are spending more time looking at television than in attending school. Extensive substitution of television, radio, and movies for reading would seem to have a more serious effect on reading development at certain ages than at others. In the lower grades of the elementary school when children are learning to read and do not yet have the facility to read widely, the effect of these mass media would seem to be less than during the intermediate and early adolescent years when voluntary reading normally reaches a peak. This latter period appears to be the time when reading interests are built and when fluency and vocabulary are

¹Lieber Anker. "Television, Here I Come," *English Journal* XL (April, 1951), 218-220.

increased through wide reading. At this period many of the programs of radio, television, and the cinema make a strong appeal—the programs calculated “to keep you in suspense,” the “westerns,” the crime and mystery programs. These present in a more intense form most of the elements that children find interesting in books. During later adolescence the mass media are not likely to have so much influence on reading development since study, social activities, and part-time work normally reduce the amount of leisure reading which most individuals do. However, even then fluency of reading depends a great deal on wide reading, and most adults have built their reading vocabulary painlessly by extensive reading in different fields. Of course it must not be assumed that all the time which the majority of adults spend on radio, television, and movies would otherwise be devoted to reading.

The effect of mass media on the desire to gain information and pleasure from reading can only be inferred. Reading requires a certain amount of effort; the reader cannot expect the book to come to him; he must read with an active mind. Most of the programs of the mass media, on the other hand, require a minimum of effort. As one college boy said, “Why should I read three pages of description in *Ivanhoe* when I can see it all in a flash more vividly on the screen?” That is true, but he should not assume that he is gaining the same values from looking at the pictures that he might have gained from reading the book as Walter Scott wrote it.

Even the most worth-while radio, television, and movie programs are not conducive to consecutive thinking about a subject. In fact, they may interfere with systematic and critical thinking. The effects of a very fine program may be dissipated by the distracting influence of the one which immediately follows. In reading, on the other hand, it is possible to delve deeply and thoroughly into any subject and to stay with it until all the available sources of information have been used. Deliberation also is possible in reading. At any point the reader may stop and think; he is not hurried on to a new idea before the previous one has been woven into his background of experience and thinking.

Although the mass media may harm reading development by competing for the reader's time, presenting information in a manner that demands no effort, and discouraging continuity of thinking, there are ways in which they may contribute to effective reading. Television, radio, and motion pictures may supply a valuable background of experience for reading, may build oral vocabulary, and may stimulate

interests which lead to reading. Since experience must precede effective reading, and oral language is basic to reading, it is reasonable to suppose that the other media of communication have a real contribution to make to reading development—that they may serve as preparation for a wider, richer experience in which reading is involved.

The importance of a background of experience for interpreting the meaning of printed material is well established. The meaning of the word *jungle* is infinitely enriched by pictures of adventure in the jungle. Exploration of political issues in a radio program enables the listener to read the news and editorials with more understanding. Words heard in these programs may either take on more precise meaning or indicate a range of possible meanings.

Studies have shown that motion pictures derived from books have increased the library circulation of these books. Dr. Lyman Bryson's radio program, "Invitation to Learning," is also an invitation to read the great books discussed. Almost any program may arouse interest in further learning through reading.

Any avenue of learning has enough positive values to justify its inclusion in a well-balanced daily program. This balance among looking, listening, writing, speaking, and reading is important at all ages. Parents have a special responsibility for helping children to plan daily schedules that contribute to their best all-round development.

However, for the most effective planning of such a program, we need more knowledge—knowledge of what individuals get out of these various media, and knowledge of how individuals can best learn from them. As one student said, "We have to learn now to learn in these different ways."

Very little is known about what is actually communicated by different media. A few studies have been made of what children remember from the movies. P. E. Vernon recently investigated what people got out of British educational broadcasts. The results were rather discouraging: they indicated that few ideas were gained, and that fewer still were accurately remembered. The results plainly showed the importance of making connections with the listener's personal interests. In a study² made for the Time-Life magazines research committee, individuals were found to differ widely in their responses to the same printed passages. One person, after reading a popular account of Orson Welles's broadcast, "The Invasion from Mars," summarized her com-

²Ruth Strang, *Exploration in Reading Patterns*. Chicago: University of Chicago Press, 1942.

prehension of the passage in the sentence, "We should be prepared for something like this." Another person, reading the same article in a shorter time, was able to make a comprehensive, accurate, and well-organized summary of the author's thought.

Even an advanced seminar of graduate students interested in the communication process varied greatly in their responses when a poem was read to them orally. One, a speech teacher, paid attention to the situation in which the poem was read rather than to the poem itself. Some had a strong emotional reaction which they could not express in words; others could describe their feelings clearly; still others recounted personal experiences suggested by the poem. Individuality of response, in this group at least, predominated over the commonality of reaction which might be expected from a common stimulus. Each person seems to respond to a poem, speech, or picture from the vantage point of his own individuality.

In view of this wide variation in response to the various media of communication, it is difficult to generalize as to the place of reading in the whole picture. We might, however, attempt the following analysis of the interrelation between reading and other media of communication:

Each medium of communication has a special contribution to make. Television, radio, and motion pictures may build a background of experience and oral language which is basic to the comprehension of printed materials. In addition, each medium has its own unique values. A performance of a play over the radio may give the listener a greater understanding of the human relations involved than he could obtain from reading the play; moreover, reading it afterward might not enrich the experience. However, the performance might lead him to read other plays by the same author or other plays on a similar subject.

The availability of a book is not limited as to time; the book awaits the reader; it is there when he is ready for it. His use of the other media is limited by the time at his disposal. Some programs he can never hear or see because they conflict with his other engagements; other programs come at a time when he is not "in the mood" for them.

Reading can be more intensive and consecutive than radio, television, or motion pictures. The reader's thought is not interrupted by commercials or by another program; he is not distracted by a change

of topic. Reference books are available to many readers who want to track down an idea or get a well-rounded view of a question.

What reading ought to do is not what reading actually does. Reading material is available through public libraries to only about one in five persons. Few people have learned to read with optimum efficiency. This is important because personal development through reading depends upon availability of books and proficiency in reading. Many high school students do not master reading skills. Nor do they develop the kind of reading interests that lead them to be selective in their reading, to follow through a question or problem by thoughtful reading, or to gain insight into the human relations depicted in literature that is true to life. Persons who can read and want to read, will read; they will find time for reading in a well-balanced daily schedule.

Reading the Mass Media of Communication

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Our schools, both traditional and experimental, are still chiefly preoccupied with the printed word, particularly as it appears in books. Conservative and progressive schools are distinguished mainly by the fact that the former rely upon a limited number of standardized materials in the form of textbooks, while the latter emphasize diversity and abundance of printed matter. The former generally permit the book to dominate the learner; the latter use it as a learning tool in the active process of finding information, solving problems, and enjoying leisure. For both, the book is the key and the symbol of education. Although it is now many centuries since printing was invented, making mass education possible, the reading of print remains an essential part of the educative process. The development of a generation of discriminating readers remains one of the proper objectives of the school. However, perhaps as a result of a characteristic inertia, the school has been relatively unaffected by the later inventions which have revolutionized communication in modern times.

In a sense, books may be considered one of the mass media of communication. Thousands of new book titles appear each year and are distributed to millions of consumers. Library circulation and bookstore sales run into many millions. Nevertheless, in comparison with the total potential market, books reach a relatively small proportion of the total population. Millions of adults read less than one book per year. A sale of more than 10,000 for a single title is regarded by publishers as unusually successful.

The term "mass media" is commonly applied to those agencies of communication which are regularly utilized by great masses of people. A single magazine is read each week or each month by millions of people. A single radio or television program or motion picture is heard or witnessed (i.e. read) by millions. A single newspaper is read by more than half a million people every day, and syndicated news stories and columns in newspapers are read by millions each day. We think of the mass media today, then, as radio and television, motion pictures, newspapers, and magazines.

Although the mass media in the United States are operated chiefly for profit rather than for education, their educative effects, for good or evil, are unmistakable. Great masses of human beings rely upon them for their knowledge of current events, for their enjoyment of the arts, for religious inspiration, and for their shaping of attitudes and the formation of ideals.

School children and young people, particularly, are profoundly absorbed in the mass media. The evidence shows that they spend from two to three hours or more each day listening to the radio, and even more in viewing television where it is available. They spend a half hour or more per day in reading the newspaper (chiefly the comics and sports pages), and countless hours in reading the comic magazines, the pulps, and the popular magazines on the newsstands. Of the 90,000,000 or more Americans who, until recently at least, frequented the motion picture theater each week, a large proportion are children and youth. If we consider that these activities continue through the fifty-two weeks of the year, it is reasonable to estimate that the average boy or girl spends more time in association with the mass media than with the school. Since this association is usually completely voluntary and highly cooperative emotionally, it may be assumed that the mass media are highly effective educators.

The mass media can be dangerous competitors, or they can be powerful allies of the school. In actual practice, they are probably both, but perhaps more often competitors than allies. A few excellent news broadcasts and commentaries, the symphony concerts, some outstanding plays, forums and press interviews, illustrate the ways in which radio and television regularly aid in the educative process. Magazines, which supply readers with fiction, history, political analysis, child psychology, news of sports, hobbies, and scientific developments, suggestions for interior decoration, home building and maintenance, clothing, health care, choice of schools and vacation spots, as well as scores of other types of informational and recreational materials, offer the school a rich source of educational aids. Even some comic books have been known to start a child on the way to a pleasurable reading of good books. Newspapers, with all their dangers and weaknesses, are indispensable to an educational program. As for motion pictures, the best of them have served to stimulate strong interests in good plays and novels, and have in other ways measurably facilitated the teacher's work.

On the other hand, the complaint is made that perhaps the majority

of radio and television programs are banal, fatuous, overstimulating, or productive of socially undesirable attitudes. Many of the magazines which sell, in the aggregate, scores of millions of copies on newsstands in drug stores, magazine stores, general stores, and railroad stations specialize in highly sensational representations of crime and sex. Others, less sensational, present distorted pictures of human relations, materialistic and superficial conceptions of life values, and false stereotypes relating to minority groups and peoples of foreign countries. Newsreels, instead of reflecting the important events of the day, confine themselves to brief portrayals of visiting dignitaries, swimming contests, football games, and the antics of trained monkeys. Too often the newspapers present biased versions of the news and have overplayed the trivial, the sensational, and the sordid.

The obvious implication of these facts for schools is that they should make maximum use of those aspects of the mass media which help young people to gain a better understanding of themselves, each other, and the world in which they live, and develop in young people a critical attitude toward those aspects which present distorted pictures of life. Many schools and teachers have recognized this implication. Scores of books and articles have been published on the subject of classroom experiences with the various mass media. A number of research studies dealing with young people's interests in the mass media and with their effects upon the learner have appeared in recent years! Yet in the main the schools have dealt with the mass media only as an incidental aid to instruction or as an occasional diversion from the "serious" business of the day. The use and systematic study of the mass media as significant subject matter and as windows upon life are still relatively rare in American school curricula.

The purposes for the study of the mass media in school should be at least three-fold. First, the school should undertake to help young people to make constructive use of radio, television, motion pictures, magazines, and newspapers as sources of enjoyable leisure time experiences. Second, it should raise the young people's levels of taste in the utilization of the mass media. Third, it should develop in children and youth standards of independent judgment with respect to the mass media.

While it is true that these tasks are difficult to accomplish, they are made easier by the keen and universal interest of boys and girls in the mass media. Class discussions of comic books, radio and television programs, motion pictures, and magazine and newspaper stories never

lack for enthusiastic participation on the part of most members of the class. By utilizing these interests, teachers have succeeded in making young people conscious of levels of quality, have revealed new sources of information and pleasure to them, and have put them on guard against many forms of propaganda and subtle indoctrination.

The ardent interest of children and youth in radio and television programs is well-known. In a recent study, Paul Witty¹ found that the pupils he questioned spent approximately three hours per day in viewing television programs. His study showed that these children, ranging from kindergarten through eighth grade, listened to the radio from one to two hours daily—a definite decline from figures reported in earlier studies. From 25 to 50 per cent of Witty's pupils similarly reported a decline in movie attendance since the advent of television. The thirteen programs liked best by the boys and girls were Hopalong Cassidy, Howdy Doody, Lone Ranger, Milton Berle, Arthur Godfrey, Small Fry, Sports Programs, Kukla, Fran, and Ollie, Super Circus, Cactus Jim, Paddy Pelican, Aldrich Family, and Lucky Pup. While a majority of TV owners approved of the programs for children, most teachers expressed the view that TV programs are in need of improvement.

Sterner,² in a study of young people's interests in radio, motion pictures, and reading, discovered that adventure, humor, and love are themes of persistent interest to youth, and that it is the theme rather than the particular medium which attracts. She believes that the power of any single one of the mass media upon the adolescent's mind has been overemphasized. She declares, "The sinister effect of the thrilling movie or the dulling poison of the worthless radio program is not in itself so powerful as many reformers fear. Taken all together, however, these out-of-school language activities do have great influence over the adolescent's development."

In the case of magazines, boys and girls from the earliest ages through high school exhibit keen interest in them. At the lower elementary school levels, boys and girls tend to like the same kinds of materials, but in the later grades and in high school, boys turn to themes of adventure, sports, and mechanics, while girls prefer romance, society, and fashions. After the ninth grade, both boys and girls tend

¹"Reactions to Television," *Elementary English*, XXVII (October, 1950), 349-355, 396.

²Alice P. Sterner, *Radio, Motion Picture, and Reading Interests: A Study of High School Pupils*. New York: Bureau of Publications, Teachers College, Columbia University, 1947.

to select adult types of magazine materials. Interest in comic magazines, almost universal among elementary school children, begins to wane after the ninth grade. As one might expect, there is a positive correlation between reading ability and the quality of magazines preferred, although good readers will frequently alternate between comic and pulp magazines, on the one hand, and quality magazines, on the other.

There is a keen interest also, chiefly among high school youth, in the daily newspaper. It is true, of course, that large numbers of boys confine themselves largely to the comic strips and sports news and girls to fashion news, but the foundations of interest in the newspaper are present, ready for the teacher to build upon.

Thus we observe children and youth deriving their impressions of the endlessly varying contemporary scene from newspaper pictures and headlines, the brilliantly and sometimes luridly illustrated magazine story and comic books and the vivid and rapidly moving images of sight and sound on radio, television, and motion picture screen. As they turn eagerly from one medium to another, they find themselves absorbed; they identify themselves with the people and the events portrayed for them in a continuous, colorful pageant. Here indeed are educational forces which the school can afford to ignore only at its peril.

In addition to the fact that in the United States the mass media are operated for profit rather than primarily for entertainment and education, while the schools are operated primarily for the education of youth, certain other important differences exist between the school and the rival educational agencies. Chief among these perhaps is the fact that the mass media introduce young people to contemporary culture largely by the means of persuasion, while the schools, in undertaking a similar task, have the responsibility of cultivating powers of discrimination among the more and the less desirable features of the culture. The schools, however, have the advantage of making effective use of other media, and may thus combine the elements of persuasion and the appeal to critical judgment.

Another significant difference between the work of the schools and that of the mass media is the fact that the mass media may and do indoctrinate in behalf of special interest groups, while the schools, acting in behalf of all the people, must strive for a maximum of objectivity.

Indoctrination on the part of the mass media may take the form of direct advertising of consumer products and the creation of a demand

for articles which may or may not possess real value for the consumer, of interpretation or "slanted" reporting of the news, of the creation of stereotypes, or of appeals to prejudice. While there is a degree of competition among the mass media which tends to cancel the efforts of partisan propaganda, the margin of choice in the realm of ideas in the major communication media is steadily narrowing.

The control of the mass media, as of other large sections of our economy, is becoming increasingly concentrated. The Hutchins Commission on a Free and Responsible Press recently declared, "The agencies of mass communications are big business." Eleven publishers control roughly one-fourth of the total magazine circulation, with 17 magazines out of the total of 6,000. Five publishers—Curtis, Time, Crowell, Hearst, and McCall—with ten magazines, represent one-fifth of the total magazine circulation in the United States. A few years ago a leading picture magazine sold more than \$60,000,000 of advertising in one year, and the figure is probably higher today. One magazine has an estimated readership of 25,000,000. Eighty-five per cent of American towns have but one newspaper, and of the 1,750 daily newspapers in the United States, 375 are owned by a few large chains controlling more than one-fourth of our total daily circulation. The great national news services and syndicates further tend to centralize the sources of news. Even some of the syndicated comic strips carry their burden of partisan propaganda. And a similar tendency toward centralized control could be abundantly documented in the areas of radio, television, and motion pictures.

These facts are reported, not to disparage the unquestioned achievements of the mass media, both in technical and artistic excellence, but to define more realistically the problem which these media pose for the school. They imply that young people must be aware of the nature of the controls which operate in the realm of communication. They imply that youth must develop skill in critical reading, listening, and viewing. They imply that local newspapers should be supplemented in school with newspapers and periodicals of widely varying opinions, including English language publications from abroad.

Complaints about the relatively low level of taste exhibited by millions of Americans in their selection of radio and television programs, motion pictures, and magazines have been widespread and insistent. Responsibility for this low level must be shared by the mass media themselves. As Edgar Dale has pointed out in the *News Letter*

for January, 1951,³ what the public wants is in part a function of what it has been getting. Dale further makes the important observation that the mass media have the responsibility of educating the public taste and of permitting that minority which prefers high grade productions to become a majority. "Most children," he declares, "do not have an opportunity day by day to walk to a table in their school, or a bookcase in their home, and pick up the finest children's literature. We do not even try to create theatrical films especially for children." One might add that most people, children and adults, do not have the opportunity day by day to tune in a radio or television program of high quality, or view a first-rate motion picture.

Nevertheless, the schools, in neglecting their responsibilities with respect to the mass media, must bear a great share of the blame for the level of the public taste. School programs, at both the elementary and secondary levels, should plan systematically to undertake improvement of young people's esthetic discrimination with respect to the mass media. In those cases in which such efforts have been put forth, gratifying results have been attained.

In the development of techniques for the improvement of esthetic discrimination, we have much to learn from experiences in the teaching of literature. So long as literature was taught as subject matter to be learned, dissected, and reported upon, young people failed to develop keen and continuing interests in good books. When the class period was over, many returned with relief to the comic book and the pulp magazine. The fact that the reading public for good books is still a very limited one may probably be attributed in large measure to the persistence of the older procedures in English classes. Where the reading of literature has been made an esthetic experience, with emphasis upon the emotional aspects, the results in terms of voluntary reading have been demonstrably gratifying. Thus in dealing with literary and artistic materials in the mass media, the effort should be to provide as many pleasurable experiences as possible with the best productions available, with emphasis upon voluntary choices by students and with focus on understanding, enjoyment, and effective sharing, rather than recall of details.

Consideration of the mass media should enter prominently into curriculum planning. One writer⁴ recommends that a semester of work

³Bureau of Educational Research, Ohio State University.

⁴I. Keith Tyler, "Developing Discrimination with Regard to Mass Media," *North Central Association Quarterly*, XXIII, No. 2 (October, 1948), 196-226.

in a high school class be devoted to the study of the mass media. Actually, an entire year could be devoted to them as one approach to the study of American life. In such a program the major concern should be the understanding of the current scene, rather than primarily the nature of the various media.

Curriculum-makers, in considering this problem, will need to choose between a sequence of units dealing with each of the media, or with a series dealing with problems or themes drawing on the various media simultaneously. There are strong arguments for the latter plan. As Sterner has pointed out, the matter rather than the vehicle is of concern to young people. The skills involved in critical discrimination employed in relation to one medium are essentially the same as those employed in relation to another. The evaluation of a play calls for much the same criteria whether it is performed on the radio, on television, or in the movies. Only certain technical differences may call for separate analysis. A news commentary requires basically similar treatment regardless of the medium employed. In order that the main object of attention may be upon the substance rather than the vehicle, organization should probably be around the former rather than the latter. Such organization need not interfere with a study of the technical advantages and limitations of the various media.

Schools have experimented with both types of units. Successful work has been done particularly in photoplay appreciation, the newspaper, and the magazine. Other schools have taught units on humor, in which the subject matter ranged from a Bob Hope program and comic books to Mark Twain, Dickens, and Thackeray. Human relations, and particularly the problem of attitudes toward minority groups, have been considered in relation to all the media. Current events have been studied with the aid of the newspaper, the newsmagazine, the journal of comment, radio programs, and documentary pictures.

Whatever the type of curriculum organization, the mass media of communication offer a rich source of stimulation and information. They provide also a stirring challenge to schools in a democratic society.

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Television and Effective Education

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The widespread interest in television shown by boys and girls today has led educators into a new field of research. Studies reveal that children spend on the average of 3 to 4 hours daily in televiewing. For example, Cunningham and Walsh, Inc. have employed a typical American "secret-test" city as a research laboratory since April 1948. Their third annual census completed in June 1950 showed that the "heaviest televiewing is the age group 5 to 6 years where the figure is 4 hours a day. At age 5 and 6 homework is almost non-existent. From 7 years on, televiewing tends to diminish, obviously because the school begins to compete for after-hours attention, and also because the growing child begins to develop his own active interests."¹ The average time spent in televiewing by children of ages 7 to 11 is 3 hours daily. At the junior high school level, interest in TV continues. It has been found that groups of junior high school pupils spend 14 to 28 hours per week televiewing. A survey, conducted in the Burdick Junior High School in Stamford, Connecticut, showed that although only 50 per cent of the students came from homes having TV sets, 79 per cent of the student body followed TV programs regularly. Owners averaged 3.86 hours a day televiewing; non-owners 2.64 hours. The weekly average for owners was 27 hours a week; for non-owners, 18 hours a week. It is of interest to compare the time spent on TV with that occupied by the entire school curricula. The school schedule required students to be in classes 27 hours and 55 minutes each week. Twenty-seven hours each week were devoted on the average to TV.

Phillip Lewis,² assistant principal of South Shore High School in Chicago, studied 500 students who had TV sets in their homes. In one survey, these students averaged $23\frac{1}{2}$ hours per week televiewing. Six months later viewing averaged $25\frac{1}{4}$ hours per week. At present, viewing averages 19 hours per week. "To me this indicates that parental control is making itself felt, the novelty is wearing off and

¹Shayon, Robert Lewis. "Children Give Hours Daily to Video, but Emotional Hunger Hangs On." *The Christian Science Monitor*, August 31, 1950, p.5.

²"TV Viewing Hurts Grades of Sophs and Juniors, but Helps Seniors." *Advertising Age*, Vol. 21 (May 8, 1950).

both children and parents are becoming conscious of the time consuming factors involved. The rise indicated for six months is, we believe, attributable to the opening of the coaxial cable to Chicago and the establishment of additional stations with increasingly better fare."

Attitude toward TV. Critics assert that TV usurps the leisure of children and young people, leaving little time for other more desirable activities and recreational pursuits. Several writers indicate that little or no educational possibilities inhere in TV since it strives to expand its audience by appealing to the masses of average and near average persons. They insist that, at best, popular TV programs keep the audience on a plateau insofar as development is concerned. Recognition of these and other limitations led one writer to conclude that "Television may be as dangerous to culture as the atom bomb to civilization."³

We have heard recently many other accusations levelled at television by parents and teachers. Some parents assert that TV is converting children into a race of spectators. Others report that children are aggressive and irritable as a result of overstimulating TV programs which lead to sleepless nights and fatigued eyes. Some elementary school teachers insist that it is difficult to interest children in school subjects which prove decidedly less appealing than adventurous, exciting offerings on TV.

On the other hand, some parents and teachers cite improved family relationships and companionships as a result of TV. And some teachers indicate that they are finding considerable opportunity to associate TV with wholesome, constructive endeavor in school.

A Survey of Televiewing. In an effort to secure data regarding the influence of TV on children, questionnaires were submitted to 2100 pupils in the elementary schools of Evanston, Illinois, in April and May, 1950. Interviews and oral questions were used to obtain information from kindergarten and first grade children. Data were also obtained from teachers and parents.

This survey showed that 43 per cent of the pupils have TV sets in their homes. In the homes where TV sets are owned, the average time spent in televiewing is three hours daily as compared with a little over an hour and one-half in homes where there are no TV sets. Pupils spend much less time listening to the radio than in televiewing; they also go to the movies less than formerly. The dominant reason for

³Emerson, R.W. "Television's Peril to Culture." *The American Scholar*. Vol. 19, No. 2 (Spring, 1950) (Editorial).

their preference is the combined audio-visual appeal of TV as the following comments suggest. "You can see the action." "You can see what people look like." "It's fun to see as well as to listen."

The responses to one section of the questionnaire reveal that many pupils find little educational value in TV programs. Sixty-seven per cent of the pupils state that TV does not help with their school work. On the other hand 30 per cent of the pupils believe that TV helps.

Responses of Parents and Teachers. Over 1700 replies were received from parents of children in the elementary school grades. Fifty-five per cent of TV owners approve children's programs, while 25 per cent endorse certain programs only. On the other hand, only 16 per cent of the non-owners approve children's programs. Six per cent disapprove and 78 per cent are undecided or have no opinion.

Forty-eight per cent of the teachers express dissatisfaction with TV. Twenty-seven per cent recognize some serious limitations in TV at present but acknowledge its promise and potentiality as an educational medium.

Among limitations frequently mentioned are the low standard of the educational offerings and the poor quality of the entertainment. Another frequently mentioned characteristic is the inferior quality of the informative programs. These teachers also criticize the children's choices. One teacher states that children's choices today "are not programs that might afford information or be of educational value—in-
stead children select the action-packed, gory, thrill-laden presentations." The teachers point out that the over-stimulation of such programs tends to be undesirable for the nervous child and generally disruptive to normal, wholesome growth.

It should be indicated that some teachers endorse TV. It is of interest that criticism is greater among teachers who do not own TV sets than it is among teachers who have sets. Moreover, some teachers find numerous opportunities to associate TV programs with constructive educational effort. These teachers recognize the present limitations in the offerings on TV, but they stress the newness of the medium and its potentiality for wholesome endeavor.

A Survey of High School Pupils. A study of high school pupils was made in the Oak Park-River Forest Township High School in January, 1951. Sixty-four per cent of the students have TV sets in their homes. There is a much stronger interest shown in TV than in any other leisure pursuit.

The survey revealed, however, that these young people become less

enthusiastic about television as they grow older. The most ardent viewers are to be found among the sophomore group, with progressively less interest shown by high school juniors and seniors.

For the 64 per cent whose families own television sets, the following results were obtained. The average sophomore views TV approximately 18 hours per week; the average for the juniors is 14 hours, and for the seniors, 12 hours. Students who do not have sets in their own homes devote 9 to 14 hours per week to TV.

Only 30 per cent of the students in TV-owning families maintain regular viewing schedules. Many students are permitted to view the programs irregularly, during any hours which are otherwise unoccupied. Fifty-two per cent, however, are encouraged to view TV program only after completion of home work.

The survey indicated that sports programs were the most popular among high school students. Boys showed a strong preference for sports and girls were enthusiastic viewers of the Arthur Godfrey show. The most popular programs, in order of preference, were: athletic contests, the Milton Berle show, "Toast of the Town," Arthur Godfrey, the Fred Waring show, movies, "Show of Shows," "Comedy Hour," and "What's My Line?" "Kukla, Fran, and Ollie," and Garroway-at-Large" tied for tenth place favorite.

The high school teachers generally qualified their opinions on the value of TV for teen-age students. Most of the teachers admitted the great educational possibilities of television, but emphasized that students should spend only moderate amounts of time in televiewing and that viewing should be carefully guided and supervised.

Although 64 per cent of the pupils have TV sets in their homes, only one-fourth of the teachers are owners. The owners among the teachers, as in the case of parents, are less critical of TV than are non-owners.

Teachers themselves preferred such programs as "Meet the Press," "Firestone Theater," the Fred Waring show, "Twenty Questions," and "Show of Shows," but disapproved of most currently popular murder mysteries, westerns, "inferior movies," and "cheap variety shows."

Some Ways to Improve TV. Suggestions for improving TV may be readily obtained from children. This is shown in an article by Dorothy McFadden in *Parents Magazine* (January, 1949). Ninety-three per cent of 300 children of ages nine to twelve stated that they wanted a greater variety of programs. They indicated too that they preferred real actors to puppets. McFadden suggests that more programs be de-

veloped to include: (1) demonstrations by skilled craftsmen; (2) news events and visits to places of local interest; and (3) holiday features.

In letters received by the writer from pupils in these surveys, it has been suggested that TV offerings be expanded or modified to include a larger number of dramatizations and programs devoted to science, social studies, and current events.

Recently seven of the nation's most powerful education associations have formed the Joint Committee on Educational Television to procure FCC allocation of television frequencies for educational programs. The Joint Committee is asking that at least one television channel in each large city be set aside for educational use and 20 per cent of the channels in the ultra high frequency band, if and when these are opened for television.

Despite this vigorous campaign, Columnist John Crosby has said, "the greatest foe (of educational television) is not the greed of commercial television but the apathy of educators themselves."

Making the Most of TV. Results of surveys quoted in this article indicate clearly that TV has a stronger appeal for children and youth than any other means of entertainment. TV is a force, however, that can be controlled and in many cases used to motivate accomplishment of studies and home duties. The inescapable conclusion seems to be that television is a real problem or liability largely in homes where it is permitted by parents to become one. But it should be pointed out, too, that many programs are inferior and that few are available which promote and develop worthy interests or offer educational stimulation. Parents, teachers, and commercial agencies should cooperate to develop a series of more worthwhile programs. The almost universal appeal of TV offers an unparalleled opportunity for influencing children in positive ways.

To counteract the strong influence television exerts on most children, parents and teachers might well adopt the following suggestions:

1. Provide rich and varied experiences for each child.
2. Study each child's pattern of reading. Try to guide him toward a balanced program of varied and individually satisfying reading experiences.
3. Know each child and his needs. Find out what he is seeing on television or in the movies. Let him share with you the pleasure he finds in both types of programs.

4. Set aside time for reading and discussing books and magazines. Read with children.

5. Guide each child to listen discriminately, to read critically and to develop standards for appraising comic books.

6. Provide books and reading materials on different subjects and gradually increase their difficulty so as to improve children's reading skills.

7. Remember, finally, that each child needs to find joy and satisfaction in reading. Help him to develop the necessary skills, and then encourage him to read about things that strongly interest him.

The antidote to television lies in directing boys and girls to find pleasure in good books and in other desirable activities. To accomplish this goal, the home and the school should offer each child a series of successful experiences that fulfill his needs and satisfy his interests.

Newspapers Face the Challenge of Mass Communications

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What is the challenge of mass communications?

Certainly it is the same challenge that has been faced in increasing measure since Gutenberg printed the first words on his primitive press: *Fiat Lux*—Let There Be Light. Implicit in these words is the challenge to believe in the minds of those individuals who make up the community of mankind, a challenge to achieve the profound belief that with truth and free discussion, man can advance to new achievements of social and ethical worth.

Such was the faith in free and untrammelled communication that led John Milton more than three hundred years ago to speak up courageously for the liberty of unlicensed printing:

And though all the winds of doctrine were let loose to play on the Earth, so Truth be in the field, we do injuriously by licensing and prohibiting to misdoubt her strength. Let Her and Falsehood grapple; who ever knew Truth put to the worse, in a free and open encounter.

And the faith of Jefferson when he wrote in 1787:

Were it left to me to decide whether we should have a government without newspapers or newspapers without government, I should not hesitate for a moment to prefer the latter.

We are today perhaps more skeptical for we have seen and are seeing the media of mass communication subverted to anti-libertarian ends. We have seen the destruction of a free press in Nazi Germany and in the Soviet Union. We have seen the light of the gallant *La Prensa* of Argentina extinguished by force and violence.

The challenge to us, therefore, is real and immediate, and of fundamental importance. It is essential to the continued existence of a free society that its channels of social communication maintain the free flow of information, and beyond that the unhampered evaluation and expression of ideas, popular or unpopular.

There are two approaches to the challenge. Both are related to each other and must interact on each other. Both are needed.

One approach may be termed idealistic: that which sets up the theoretical goals toward which the media of mass communication should strive in serving a free society.

The other is realistic: that which evaluates the performance of these media in terms of the realistic conditions under which they must operate.

The excellent, though largely theoretical, report of the Commission on Freedom of the Press published by the University of Chicago,¹ containing the considered judgments of such worthy scholars as William Ernest Hocking and Zechariah Chafee, Jr., is an instance of the first approach.

The rather more pragmatic Royal Commission investigation of the British press² tends toward the second approach.

In general, those outside the media have tended to emphasize the ideal to the comparative neglect of practical means of achieving them, while those engaged in the day-to-day effort within the media have tended to lose sight of the goals.

This paper cannot seek to reach the necessary synthesis of the two approaches but will endeavor to point out a few of the trends which may be developing for the American newspaper in the context of the economic and social reality in which it must operate.

The inception and rapid growth of such media of mass communication as radio, motion pictures, and television represent the most immediate sources of challenge to the newspaper, in addition to the continuing challenge of its position as a profit-making, consumer-satisfying business.

For it is in the business office, for better or worse, where the publisher deals with questions of debit and credit, profit and loss, that the trends of the American press are molded. The newspaper is part of the vast industry which purveys the important service of information and entertainment to the American public. Few people are conscious of newspapers as businesses; we are more apt to take them for granted, like the Post Office and Water Department. We tend to assume, because of our traditional view of the press, that there is in it some inherent obligation to the public weal, as indeed there is. But it is a voluntary compact between the newspaper and society in general, not

¹Commission on Freedom of the Press, *A Free and Responsible Press*, Chicago, University of Chicago Press, 1947.

²Royal Commission on the Press, *Report*, Cmd. 7700, London, 1949.

a constitutional requirement of duty on the newspaper's part. The first amendment of our Constitution imposes only the restriction that "Congress shall make no laws abridging the freedom of speech or of the press."

Newspapers are not public utilities, and indeed, we must be grateful for their independence from any quasi-governmental function. For we have had bitter lessons, in this country and elsewhere, of newspapers which, directly or indirectly, are the creatures of government. The venality of the French press in the years before the fall of France is adequate evidence of this danger.

If the newspaper is essentially a profit-making enterprise, there are two forces of importance in determining its social role. The first is competition; the second is consumer pressure. Competition in the newspaper business is of two types: rivalry between newspapers within the industry, and the competition of the industry with other media of mass communication. It is the challenge of other media, mainly that of radio and television, with which this paper is concerned.

There are three ways of meeting competitions: "Ignore them, fight them, or join them." Instances of all three techniques are readily apparent.

First, to dispose of the weakest:

When radio was a gadget in the crystal set days, it received its share of feature stories and humorous gags in the newspapers. When, however, it began to grow up, when it began to compete for advertising, when it began to assert itself as a channel of information and ideas, the immediate response was the silent treatment by the press. This reaction similar to that of today's movie moguls toward television. For years, newspapers reported as little about radio as they could get away with. But consumer demand for program information and news about radio personalities forced the newspapers to come to terms with the reality of the new medium.

Once the challenge could not be ignored, the two other possibilities began to shape up.

For one thing, the newspapers "joined them." We find that "the number of newspaper-affiliated radio stations has more than doubled since 1939 and is more than five times the number linked with newspapers 20 years ago."³

³Warren K. Agee, "Cross-Channel Ownership of Communication Media," *Journalism Quarterly*, Vol. 26, Dec., 1949, p. 410. The statistical material cited here is based on Mr. Agee's study.

In 1929, 95 standard broadcast stations were newspaper-affiliated out of a total of 600 stations. By 1949, the number had jumped to 476 out of a total of 1,975 stations. Newspapers owned 38.8 per cent of the FM stations in the country in 1949 and 46.6 of the television outlets in the same year. These figures refer only to instances in which the newspaper is sole owner or majority owner. There is no indication of the minority ownership or of "working agreements" between stations and newspapers. The only two facsimile stations in existence in 1949 were in the hands of newspapers.

Warren K. Agee points out that the entrance of newspapers into so-called "cross-channel ownership of media" has been in the face of the FCC's policy in which "for purposes of diversity a non-newspaper applicant for a station is preferred over a newspaper applicant, all other factors being equal." He continues, "it must be noted, however, that newspapers have won about as many contested cases as they have lost since this rule has been in effect."⁴

Group ownership of newspaper-radio chains indicates a steady increase. Agee reports:

In 1929, 12 such groups controlled 107 (5.5 per cent) of the dailies and 20 (3.3 per cent) of the standard broadcast radio stations. By 1939, this number had increased to 36, which showed affiliation with 218 (11.27 per cent) of all dailies and 91 (11.9 per cent) of standard broadcast stations. Today's 53 combination groups represent 18.3 per cent of all daily newspapers, 7.7 per cent of AM stations, 10.69 per cent of FM stations, and 16.6 per cent of all television stations.⁵

The trend is clear: both individual and chain newspapers are moving into other channels of communication. Yet the total picture is not a clear or simple one. There are a good many conditioning factors, some of which were at work long before the importance of the new media began to be recognized. It is not unreasonable, for example, to conceive of the trend toward cross-channel ownership of media as simply an extension of the much earlier trend of newspaper ownership from local to chain control which, itself, seems part of the general "big business" pattern of the American economy.

War prosperity and certain limitations of expansion within the

⁴*ibid.*, p. 413.

⁵*ibid.*, p. 415.

newspaper industry itself may have freed much of the investment funds which then went into cross-channel ownership. However, following the war when newsprint, though more expensive, became available in the open market, and when equipment and building restrictions were lifted, investment in cross-channel ownership continued and therefore must be regarded as a recognized potential of newspaper expansion.

The fear of this expansion is evident in almost any study of the American press. The words, *monopoly* and *trust*, are ugly enough in connection with the history of American business, but they are even more sinister in connection with the press.

The Hutchins Commission concludes, in part:

We recommend that government facilitate new ventures in the communications industry, that it foster the introduction of new techniques, that it maintain competition among large units through the antitrust laws, but that those laws be sparingly used to break up such units, and that, where concentration is necessary in communications, the government endeavor to see to it that the public gets the benefit of such concentration.⁶

Despite the implication, which seems the theme of many of its other recommendations, that the government's role in the field of mass communication be increased to perhaps dangerous proportions, the Commission implies that there are benefits to be derived from the concentration and articulation of media.

What are these benefits? One answer, which Herbert Brucker cites, is that "the experience and discipline inherited from three centuries of journalism, that is the Fourth Estate's fumbling but fundamentally valiant battle in search of truth, plus its established position and economic stability, combine to make newspapers peculiarly fitted to operate the sister service of radio."⁷

He continues:

After all, this argument runs, journalism is journalism. What difference does it make whether its agent happens to be a rotary press or a broadcasting transmitter?⁸

⁶Commission on the Freedom of the Press, *op. cit.*, p. 79.

⁷Herbert Brucker, *Freedom of Information*, New York, The Macmillan Company, 1949, p. 83.

⁸*ibid.*, p. 83.

Professor Paul Lazarsfeld points out the complementary positions of the press and other media in the scope and coverage of news in terms of their relative strengths. Radio and television coverage of events have the potentialities of speed and immediacy; newspapers of scope, tangibility and depth.⁹

But there are evident disadvantages, too. First, that a comparatively small and concentrated group, a group with specific economic identifications, may be sitting "like medieval robber barons perched in strongholds on the hilltops [dominating] the news traffic that passes by."¹⁰ It is this view that seems to condition the Federal Communications Commission attitude toward cross-channel ownership of media, although its hearings on the problem, held from July, 1941, to February, 1942, elicited only a single incident in which a dangerous situation was evolving. That was in Charleston, South Carolina, where a newspaper-owned radio station was competing against a non-newspaper owned station and the newspaper involved would not print the logs of the rival station. The impression which the 3500 pages of testimony gives is that the monopoly was more a potential, than an actual, danger.

Secondly, there is the advantage of a sort of check and balance among the new media. This is even more apparent if one accepts the view put forth by Raymond D. Nixon, that "the growing number of both AM and FM stations together with the advent of television and facsimile newspapers is filling the gap left by the 'disappearing dailies.'"¹¹ This competition exists on both the economic level in advertising and on the communication level in performance. Independent and competitive media, it is reasonable to assume, may continue the trends started in the past five years or so of mutual criticism. Examples of this type of activity, which must certainly result in benefits to the public, are such radio programs as Don Hollenbeck's "CBS Views the Press," such newspaper critics of radio as John Crosley, and such magazine observers as A. J. Liebling in the *New Yorker*.¹²

⁹Paul F. Lazarsfeld, "Some Notes on the Relationship Between Radio and the Press," *Journalism Quarterly*, Vol. 18, March, 1941, pp. 10 to 13.

¹⁰Herbert Brucker, *op. cit.*, p. 83.

¹¹Raymond B. Nixon, "Implications of the Decreasing Number of Competitive Newspapers," *Communications in Modern Society*, Urbana, University of Illinois Press, 1948, p. 54.

¹²Mr. Liebling's *New Yorker* articles have been collected in a volume entitled *The Wayward Pressman* (Garden City, New York, Doubleday & Company, 1947) and later articles in *Mink and Red Herring* (Garden City, New York, Doubleday & Company, 1949).

Freer economic competition among newspapers and between the newspaper and other media, it seems valid to assume, will lead to an improvement of quality of service to the public. It is not altogether necessary to use the future tense. For we have tangible evidence that this already has taken place. The sense of competition and challenge which newspapermen have felt has led to a reevaluation of the function of a newspaper in mass communication and the desire to improve their product in the bid for reader interest and response.

But let us make it clear that trends we are about to discuss are not solely the result of idealism. They are a dynamic expression of the competitive situation. If we were talking about washing machines, we would speak of the improvement of style, function, ease of operation, and the bargain price. With this in mind, let us examine these trends together with their future promise.

Reacting to the competitive situation, the newspaper began a two-fold reevaluation of itself: in terms of its product and in terms of its function.

From the first reevaluation has stemmed the gradual face-lifting of the American newspaper which is bringing to the reader clearer, more interesting and more esthetically pleasing newspaper.

Typographically, the trend is toward larger body types, clearer headlines and better illustrated newspapers. The medium which has largely stimulated this reaction is the news-picture magazine. Specialists in the field of typography and printing are redesigning newspapers and the Los Angeles *Times* is an excellent example of this.

Although the newspaper can never be wholly pictorial, the caliber of news pictures, the technique of wirephoto reproduction is improving, and the use of such visual aids as pictographs and cartoons is on the increase. Color printing in the daily newspaper is being perfected and recently a Los Angeles newspaper, which usually reserves color for its advertising, ran a striking full page color photograph of a spectacular bomb burst. It is difficult to relate directly the increased use of illustrated material to the influence of other visual media such as television but unquestionably a climate of need has been set up.

Another very important development, one rather seriously impeded in comparison to other industries, is the advance of new technical processes which can ultimately reduce the spiralling costs of newspaper production and decrease the amount of capital investment necessary to start a new newspaper. New methods of so-called "cold-type" printing which were given great impetus during a recent printer's

strike in Chicago may yet revolutionize the production of newspapers.

A practical plastic engraving process perfected by the Fairchild Company of New York has reduced the comparative cost of engraving for newspapers and is in use by many West Coast newspapers.

Cheaper processes of printing, which do not yet compare in quality with the traditional methods, may enable new papers to be started in the future where now the cost of starting even a small newspaper is extremely high and hardly worth the risk.

In 1939, William Allen White estimated that it would require an investment of two or three million dollars to start a daily newspaper in a city of more than a half-million population.¹³ Present costs may raise that figure another 50 per cent. But if the investment is cut, special interest groups such as trade unions and private entrepreneurs may be stimulated to enter the field.

From the viewpoint of the reevaluation of function, even more immediate changes can be noted. First, the appearance of other media on the scene did not, as first anticipated, cut down the potential readership of the newspaper. If anything an increased consumer demand for information and interpretation resulted. While, as Lazarsfeld points out, it is difficult to disentangle the role of world events from other factors, it is evident that more people are seeking more sources of information. It has been shown by a number of studies that the newspaper reader uses radio, television and newsreels as a means of giving dimension to the news.

It is apparent that the newspaper cannot compete with radio or television in what Lazarsfeld calls the "scoop aspect of news" and that the newspaper's function must be to enhance its service in two areas of information: reporting in depth and comprehensive coverage.

For the newspaper has certain advantages in which other media are limited. It has *tangibility*: it can be taken up at the reader's convenience. It can be read. Ideas are not as thoroughly communicated visually or orally as they are in printed form.

There is a reinforcing effect between hearing an item of news and reading it. The fact that the radio reported the bombing of Pearl Harbor on Dec. 7, 1941, substantially before the press generally, did not prevent a record sale of newspapers. If anything, it enhanced the desire of the listener to read every possible detail.

This is a perfectly normal human reaction. There is too an emo-

¹³William Allen White, *Canons of Journalism* (IX), pamphlet reprinted from the *Chicago Times*, July 2, 1939.

tional satisfaction derived from the tangibility of the newspaper. Lazarsfeld, in a discussion at UCLA, pointed out that during a newspaper stoppage in New York, a survey was made to ascertain which media were relied upon for news by the average individual. Many people told the interviewers that they read and re-read newspapers they had in the house, newspapers which were perhaps weeks old.

It is possible that investigative reporting may be increased because of the new situation. If it is no longer possible to scoop the other media on spot news, it is still very much possible to uncover news by deeper and more preceptive news gathering. And the crusading newspaper is an important part of the best tradition of the American press.

Writing style has been effected. Both the United Press and Associated Press have employed experts to evaluate the readability of their wire report and efforts are being made to improve the standards of writing and of news understanding.

The customary 5-W writing style is slowly giving way to the livelier, more interesting, featurized style.¹⁴ Before the days of the radio newscast, it was considered important that the lead should compress the salient facts for the hurried reader. Now the radio newsman does this and the newspaper is seeking way of motivating the reader to read further into the story. The competition of visual media prompts the use of a more descriptive, eyewitness technique to capture the quality of "thereness" which television affords.

Finally, none of the other media offer the *comprehensive* reportage of the newspaper in the fields of local, national and foreign news, and in the various departments such as sports, drama, society and business. Consider the effort and effectiveness of hypothetical daily broadcast of every item which the newspaper prints in a single day down to the classified ads. Other media must abide by the limitations of their special situation. It is precisely in filling the gap left by these limitations that the newspaper must further define its role in the field of mass communication.

But we know that a more attractive newspaper and a better written newspaper are not in themselves guarantees of accuracy and impartiality. These are dependent on an enlightened readership, a readership that demands and expects from its press honesty and accuracy, a read-

¹⁴The elements of good newspaper writing were succinctly stated years ago in the standing instructions of Joseph Pulitzer to his reporters on the New York World: "Put it before them briefly so they will read it, clearly so they will understand it, forcibly so they will appreciate it, picturesquely so they will remember it and, above all, accurately so they will be guided by its light."

ership which challenges its press. If the newspaper as a product is valued for its consistent effort to serve honestly and credibly, then in the arena of competition other newspapers must inevitably raise their standards.

Men make newspapers and to build better newspapers we must build better men, men of ideals and integrity, of pride in a worthy past, and confident of a better future. Men of this caliber have molded the newspaper business from Peter Zenger, who stood in a criminal dock for his beliefs in a free press, to William Allen White, who made of his small-town newspaper, a symbol of the battle for good. Men of this caliber are among the reporters and editors of our own day and are studying in the schools to serve the newspapers of tomorrow. Theirs is the challenge, the hope and the future.

Human Relations in Educational Programs

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This account is in essence a story of a cooperative project in which eighteen School systems participated. The project, called Intergroup Education in Cooperating schools, was an experiment under the auspices of the American Council on Education, which later became the Center for Intergroup Education at the University of Chicago.

The project was started in 1945, when many factors pointed national attention to the problems of human relations. First, there had been many serious incidents which threatened national unity, and which served as an impetus to the formation of numerous community groups. After the Detroit riots nearly three hundred new organizations focusing on human relations came into existence. At the same time, the social scientists began pointing to the tremendous gap between the intelligence and techniques available for the management of technology and those available for the management of the human and social forces. Thus a great impetus was created for work in human relations. Yet there was a scarcity of tested "know how." In effect, many people were running to the fire without knowing whether they had water or gasoline in their hose.

Public schools were not untouched by this movement. As usual in America in social crises of any sort, a cry went up for education to do something. Yet no one knew exactly what role public education should play, or what its contribution could be. Little was known about what was fundamental or sound in education for human relations.

The project referred to above was designed to explore the possibilities in education for human and group relations.

The first problem that the Project Staff met in starting work with the schools was a limited recognition of what the problems of human relations were and how they showed themselves in school. Many schools told us they did not have any problems: they did not have Negroes or Jews in school; there had not been any broken noses. So, why have an intergroup education program? Obviously, an analysis was needed of what were the basic problems in group relations and what were the fundamentals to education for better human relations. A scientific study and experimentation was needed to develop the procedures for teaching group relations that fitted into educational pat-

terns of the public schools, and that at the same time suited the goals of human relations. Techniques and methods were needed which were appropriate to the public school situation.

Actually, of course, wherever there are human beings there are problems of group relations and of human relations. In human society everywhere, no matter in what clusters one views it, there are "we-they" divisions, for example. These divisions occur in a variety of dimensions. To be sure, race and religion are the major lines of cultural cleavage in our society. But so are also the divisions according to ethnic background, recency of residence in a community, age, region. Families have these divisions according to age and authority. In connection with many matters children consider themselves as "we" in contrast to parents who are "they." In school there is a "we-they" division when there is one group that goes on to college and another one that does not.

In any community there are divisions among neighborhoods. There is *this* side of the tracks, usually a good neighborhood, as contrasted with *that* side of the tracks, usually not so good. Then, of course, you all know about the old fish and a new fish in a bowl; those who came on the Mayflower and those who came later.

It became clear also that all these "we-they" dimensions induced similar problems and behaviors, though not always in the same degree. Acceptance is difficult to achieve across the "we-they" barriers. In the case of a minority group, rejection takes many forms of discrimination. There is the problem of imputing general superiority or inferiority to the whole group. *We* are the good people. *They* are bad people. *We* are intelligent. *They* are unintelligent. *We* are the moral people. *They* are less moral people. *We* are the ones whom one can trust. *They* are the ones one can't trust. All along these divisions there are blocks to communication and understanding. Scapegoating is a frequent phenomenon. When frustrated, the "we" group usually blames the "they" group for their difficulties. Then there is the fear of difference and the condemnation of difference. It occurs in such small matters as having a different breakfast. I have known women who insisted that their way of washing dishes was the only way of really getting them clean. The "different" behavior has to prove itself to be accepted. Usually we do not start out with the assumption that there are different, but perhaps equivalent, ways of accomplishing the same ends and different ways of expressing the same feeling and different ways of reaching the same need. We start with an assumption that there is

the way and *the* good way. There are some other ways, but they are suspect.

If these basic behaviors occur in many social dimensions, then there is much ground for developing school programs by using any areas of "we-they" division that are important in a given group in a given community or school. This assumption frees many more avenues for school programs than would be the case if intergroup relations were defined as being limited to racial, religious, or ethnic relations. From the standpoint of a school program, this meant that a community or a school neighborhood need not be plagued with intergroup strife in order to have occasion for intergroup education. Nor would it be necessary for every school or every grade in school to start with these major problems of cultural cleavage in order to develop a realistic and justifiable program in this field.

There are many "we-they" divisions that one can start with and that one needs to start with in order to build understanding of the relationships and behaviors which are also basic to minority group relationships. As a matter of fact, most of our programs were initiated in some interpersonal context, and moved on only after that to the consideration of the minority problems. For example, those of you who have looked into "*With Focus on Human Relations*"* will not find the minority problem treated in any place except in a social studies sequence. A large part of that book and a large part of a program followed by that eighth grade class dealt with family relations, with sibling relations, and with peer relations, because for those students, those were the most important immediate conflicts and difficulties and for them these problems were the most reasonable starting place to learn the ideas, attitudes and skills important in group relations.

But it was not enough to describe the dimensions in which group cleavages occur and to analyze the problems and behaviors in which these cleavages manifest themselves. It was also important to define the type of growth expected for children, and the kind of things that we wanted them to learn. These we might call the educational objectives of intergroup programs.

One important type of objective is growth in ideas and concepts. In education in intergroup relations, as in any educational venture, it is important to acquire certain concepts and ideas. There are certain

*Hilda Taba and Deborah Elkins, American Council on Education, Washington, 1951.

ideas that need to be understood in order to understand intergroup relations or human relations. These ideas may not be at present part of our emphasis in schools, because group relations have not been part of our program. For example, the teachers in the cooperating group thought that American history could be enlarged to stress more adequately all varieties of people in the United States. The concept of American democracy, of its ideals and values, would be richer if developed as a story of a multigroup society, with a variety of backgrounds, a variety of basic values. This enlargement of the concept of American people was what our cooperating teachers tried to accomplish by organizing a large part of American history around the concept of movement of people: who they were, how they got here, why they came, what adjustments they had to make, what things that they brought with them they retained and what they had to change. For example, many people who came here changed their language. Many changed their skills, such as ways of raising crops. But some other things were retained, and those things made a new amalgam that we now call the American culture.

By studying comparatively and simultaneously many groups of American people, the differences and similarities in their role as newcomers could be seen more realistically. Some similarities, usually seen only obscurely, were sharpened by this organization. This was the case with the fact that all newcomers, no matter who they were or when they came, started on a low economic level.

Another illustration of needed concept with which to interpret people and cultural differences pertains to values. Each culture teaches a set of basic values. From their own immediate social environment people learn what is right, what is true, and what is good. But what needs to be learned at the same time is that those values are particular. They need not apply everywhere, and they are not universal. For example, this summer the author went along with sixty American college students, members of International Relations Clubs on college campuses, to study their reaction to international relations and the European way of life. One thing that those students just could not comprehend was that there could be people who, if they had \$100 to spend, would spend it on vacations rather than on a television set. There was simply something the matter with people who did not cherish television. Because owning a television set is an important value in the United States, they assumed it to be universally valued. Similarly, these students had to revise their concepts about the value

and importance of mechanical gadgets. They discovered that many people did not value them highly, or did not value them for the same reasons as Americans did. Prejudice often springs from parochially determined values and the inability to see cultural variations in what people need and want. We need to learn to think in terms of cultural variations.

In a similar way children's concepts of how people are housed are limited by what they have seen in their own neighborhood. This was illustrated by reactions of one group, a fourth grade, from a slum area on their trip around town. When they saw a large one-family house with many windows, they exclaimed, "I bet a hundred people live here!" Their concept of a "house" was one family behind each window.

The applications of the concept of cultural variations of course are infinite, and many mistakes are made by a lack of conscious and systematic extension of the concepts acquired by living in a particular kind of cultural environment. It is the job of the school to discover such limitations in concepts and ideas, and to do all that can be done to give all children a larger vision of what people are all about and how they live. This can be done by examining what we now teach, and by reshaping that teaching to help extend and develop ideas and concepts people need to be literate about human beings, their ways of living and their relationships with each other.

Another objective is to extend sensitivities and feelings. Feelings play an important role in human reactions. It is very important to be able to put ourselves in "the other person's shoes." The world today requires a cosmopolitan sensitivity. Today a person can take an airplane and practically in the span of one day breakfast in London, lunch in Teheran and have dinner in Hongkong. This puts a great demand on his ability to meet, understand, and to handle differences, particularly differences in how people feel and what they value.

Yet, our growing up processes are parochial. Each one of us is born into a cultural shell that limits our capacity to understand other people fully. The examples I gave to illustrate limitations in concepts were also examples of limited sensitivity. It was hard for the American students to visualize how the French feel about television. It was hard for the slum children to "feel" space and privacy in homes. In feelings as well as ideas we make culturally conditioned assumptions. I am an Estonian. Estonians are blond, blue eyes, and have light hair. In my growing up experiences all good things were attached to blondness, blue eyes, and light hair. The blue eyes were honest, because you could

see to the bottom of them. Black eyes were not to be trusted. They belonged to gypsies; gypsies stole children and cheated. Hence, black eyes became connected in my feelings with dishonesty. It was not that anybody told or taught me that. Somehow I learned it from my cultural setting. Estonians are also Lutheran and sing in church rather solemn Bach hymns. When I went to my first convention here and heard a Methodist hymn, I did not think it was religious because its melody and rhythm were gayer than what I had learned to attach to religious music. That, of course, was parochialism of feeling. I needed to get out of the Lutheran shell and begin to see religious expression more broadly. It is, therefore, an important task of the school to help extend sensibilities and feelings.

The third objective has to do with developing the social skills that are necessary for living and working in groups. It is necessary to learn, for example, how to get from dissension to consensus in group discussions. People need to learn the methods, ways of thinking, ways of planning and leading that are needed to work in groups. A greater range of skills is needed for dealing with interpersonal conflicts both in individual and group settings. Our surveys showed a disconcerting lack of adequate techniques. The most frequent devices used by young people of all ages was to return in kind, to avoid situations that create conflicts, or to withdraw and feel guilty. None of these techniques are adequate. Returning in kind increases the conflict. Avoiding a known conflict situation does not prevent the next one. People need more training in how to handle conflicts so that the end result combines the solution of the conflict with the improvement of human relations. One good example of a need in skill for handling human relations is the problem that school monitors face. These monitors often depend only on their role of power and authority to control people. To exercise it they want rules and a power to punish people according to their infractions. In one school the monitors wanted the power to issue tickets because they thought there was no other way to enforce rules. The teacher in charge called these monitors together and asked them to play out exactly what happened in a few situations about which they complained. They acted out, for example, what happened in one incident in which a monitor tried to stop a student from running up the stairs. As he shouted harder, the student answered louder and kept on running. As the situation was played out, suggestions began to come on how to influence people by means other than calling rules and threatening punishment. A whole series of such

sessions were held to develop agility in devising non-authoritarian ways of controlling behavior in halls and on the playground.

The main question, of course, was how the school program can help concepts, sensitivity, and social skills, where in the program it can be done, and how to go about it. What are the arenas of action where these things can be accomplished? One area of action is the curriculum, and a lot can be done in curriculum even without distorting the present pattern. We do not necessarily need to add an odd and disconnected unit on intergroup problems. There are many possibilities for developing human relations concepts and insights within the subject matter that is now being taught in schools. Among the numerous experiments with curriculum revision in about a hundred schools in eighteen different school systems, not one curriculum design was so inflexible that one couldn't revise it towards opportunities for teaching human relations ideas. In one school system, for example, it was possible to combine American literature and American history into one sequence. Two teachers, one an English teacher and another a social studies teacher, were teamed up for each class, and five such teams were at work in three high schools. They selected some basic ideas important both from the standpoint of history and from the standpoint of human relations, and then organized the information necessary to make these ideas clear. These were then organized into four large areas of concern. One was the American people: who they were, how they got here and why and how they moved from place to place, what adjustments they made, and what skills and customs they brought with them. The second area dealt with the system of democratic rights in America: how that system came to be; how people had struggled for it; who had access to them, and who did not. The third topic was the work patterns, or the economic structure: what kind of work went on in America, into what kind of economic systems was work organized and what these systems meant for those who worked in it. Finally, they examined how America was related to other countries of the world.

Each topic was organized around some basic ideas. For example, one idea about the rights is that they never come ready made, and that historically as well as today there are always some people who did not have equal privileges to enjoy such rights as were on the books. People have to struggle to attain them and retain them. For each right that is supported by legal structure, there is one usually on the horizon that people are reaching for. For example, the right to vote in the United

States is usually considered universal, while there are many exceptions to it in practice. But the right to a job is one for which many people now are struggling.

Another need led to developing the means for extension of sensitivities and values. It was clear that in all teaching there were greater possibilities for using the cosmopolitan cultural backgrounds of students themselves as a laboratory for creating an awareness of differences, and an understanding and acceptance of them. But further than that, reading on all levels needed to be harnessed to extending cultural sensitivities, for in literature and stories, people: their problems and feelings, their values and ways of doing things are recreated in full emotional reality, lacking in other type materials. It was therefore important that the teaching of literature serve to extend sensitivities and not simply add to the information that social studies could supply. For example, in connection with the teaching of rights, literature was selected which would create an understanding of how it felt to struggle for rights, or how it felt not to have equal rights with other people around you. The function of literature in that course was predominantly to extend feeling, insight, and to create emotional realism for the ideas handled in social studies classes. What this means can be illustrated by the experience of one teacher who thought she had created understanding of the hardships which the newcomers to any place, and especially immigrants to this country, suffered before they found a place in the American society. They had studied the problems of immigration, the naturalization laws, had examined how long it took to overcome such handicaps as language barriers and having to start with the lowest paid jobs. After this period she read them the story "Citizen" to test what they understood about adjustment of immigrants. The story dealt with Ivan and Anna, settled in New York, Ivan working in a factory, and Anna in keeping house in a tenement, and saving hard. The students were asked to write on what happened to Ivan and Anna a year after the story ended. Almost without exception the students had Ivan and Anna owning a ranch in Colorado. It was clear to the teacher that somehow her class had missed the essential core of what she had been teaching. Probably the factual material she had taught was insufficient to convey the core idea of the hardships, difficulties, and time required to adjust in a new country.

In all subject areas, then, it seemed important to combine factual emphasis with experiences and reading designed to develop feelings and insights, because in human relations these insights are often the core

of understanding. In fact these insights, these extensions of sensitivity, can be built through reading, particularly fiction. But in part students need to draw on experience—their own or those of people around them.

Another area of opportunities for cultivating literacy in human relations lies in the school life itself. People learn concepts about what human society is like, how to operate in it from the way their own school society is managed: what happens in classrooms, how the student government operates, what transpires in lunchrooms and halls. If, for example, some people are always in leadership positions, and others never have a chance, both groups of students develop different self-expectations. If leaders are chosen by criteria which are irrelevant to the job, such as personality or some talent that has nothing to do with the ability to work with people, these students learn to use irrelevant criteria in other choices of civic leadership. They learn either methods of authority or methods of democracy from the manner in which their own leadership operates.

But above all, school activities represent an opportunity to train those whose home environment is meager in chances to learn the skills and the attitudes necessary for responsible citizenship. If schools choose for leadership roles only the students already qualified, they miss out on their responsibility to train people who are not trained at home or in their neighborhoods to become responsible citizens. In any school population there are usually people whose home training has prepared them for the qualities that the student council requires. But there are also people whose home training is such as to make them quite defective in all variety of social skills. Without an effort on the part of the school to train them, they not only remain socially retarded, but they also reinforce the personal traits which enhance asocial or anti-social behavior. In most schools which the Center for Intergroup Education surveyed, about sixty per cent of students belonged to this category. What is needed in schools is opportunities for gradual training in developing the leadership qualities for such things as student council.

Further, participation in school life is also necessary for developing a sense of belonging. If there is a large number of students who do not have that sense of belonging, the school is also cultivating a group of students who are indifferent to what goes on in school and who eventually become rebellious, or drop out.

The question which many people ask is whether everyone is capable of responsible participation and of some kind of leadership. There

seems to be an assumption that only the academically able students can qualify. Our experiments seem to indicate that this is not the case. We worked, for example, in one "special" school in which the whole student body was composed of problem students rejected in regular schools, whether for academic or emotional disabilities. It was called the "bad boys" school. Even the street car conductor said, "Off to Alcatraz," when he let them off at the school. When the program first started in that school, there was not a turn but that was not watched. The whole school was thoroughly policed by monitors, teachers, and even police. And it was true that these boys didn't expect anything of themselves but bad behavior. They were in a "bad" school, they had been placed there from other schools, they expected to be bad and they *were* bad.

Something needed to be changed in their environment to change their self-expectation. For example, strict surveillance never gave them a chance to test themselves or to learn positive skills for self-control. These students needed to have some measure of freedom in which to practice self-control. They needed to feel that somebody trusted them. The new program in this school involved the boys in many projects for improving the school. They began running the student council on their own, including all finances. They replanned their school events to generate more sense of belonging and on the part of more students. They revised such courses as "Personal Regimen" to help boys with the problems they faced. In three years the school atmosphere became entirely different. When the author visited the school, she was met by one member of the Student Council at the door. He showed her around, explaining with great pride what the Student Council was doing, what they had accomplished, and what they hoped for in the future. One boy who was said to be 75 I.Q. conducted a council meeting with great practical skill and sensitivity to the needs of the group as well as to the business at hand.

It seems then that schools can fill in the gaps in social and civic training that society leaves in some people. It seems also that more people can change, provided the school has a thoughtful and practical plan for changing them. The objectives of human relation's education are not impractical dreams. We have now the knowledge necessary to achieve these objectives and to decide how to go about reaching them. Schools have both the obligation and the opportunity to put this knowledge to work to make young people increasingly more literate and more competent in handling human relations problems.

Reading with the "Sixths"

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It is a bright September morning after the usual summer vacation and they are coming. The traditional signal has sounded and in response a group of sixth graders have left their playground activities to participate in another phase of an experience begun in earlier years. At this moment these personalities stand on the threshold of another adventure. "How is it to be met?" is perhaps the question asked by the children and teacher alike. Of course each must have tucked away inside himself some feelings, ideas and attitudes which will cause the reactions and behaviors to be exhibited. To be sure the order of meeting old friends, forming new peer relations, sizing up new teachers and administrators, encountering different subject matter requirements, adjusting to a new room environment and at the same time submitting to the demands of nature and society that certain task of mental, physical and social development be accomplished is a large one. Success in gaining attitudes and abilities that will be in accord with such tasks will naturally and necessarily lead to further success and feelings of adequacy. On the other hand failure in these areas will cultivate feelings of insecurity and anxiety which in turn will form the foundations for further developmental tasks.

While watching this group approach and upon greeting each one it could be sensed that here a friend was needed. That certain spirit seemed to be lacking and the individuality shrouded in a cold, hard silence. Is this fear of the adult world?—of the peer world? Is it a feeling of inadequacy? Is this attitude temporary or is it something of long standing? The cumulative records could offer some valuable assistance in answering these questions. Upon examination of these files it could be seen that all had not been going well with these children for a year or so previous. Both academic and social growth appeared to be at a standstill and in one case regression in both areas had taken place. Likewise in only one case had there been the expected academic achievement during the previous two year period although the potential ability of the group, in the form of I.Q., ranged from 93 to 125 with the median at 105.

As the first week gradually ran out to Friday it was observed that

most of these children either played alone during recess and the noon hour or chose associates from the lower grades. Seldom, if ever, during this period of observation were two from the same age group seen together. Much quarreling was evident when a group had to be together outside the classroom and nervous tension seemed to overlay most activities. Inside the classroom both casual acceptance and firm resistance permeated the endeavors but when an error was made or an act performed that seemed odd and different loud raucous laughter pushed at the walls whereupon tempers flared, faces flushed and tears ran. Yes, by the very nature of our society organization and the belief in and respect for human beings it was realized that during the current year these children would have to begin to live, work, plan and play together in order to make a happy and productive transition to their next adventure, the Junior High School. In view of this, the following questions became the guide to a systematic appraisal of the forces behind the peer group situation. What did the teacher and counsellor, for this year, know about the structure of this child society? By what means could the operational forces in this structure be satisfactorily determined? What could and must be done once this information had been acquired? The launching of any new program of work with these children would be futile until some clear idea of the individual and group needs could be formulated.

One of the most important problems of living is that of learning how to adjust oneself with the personalities of others. In order to live happily, creatively and productively in society it is imperative that contacts and associations be made. Every association places its force and influence firmly upon us. Only through cooperative working, learning and teaching can the desired communication and interaction among persons be approached. Society requires and encourages the exchange of ideas and feelings between persons for no one can live unto himself alone when the aim is to become a happy, competent member of a democratic society. The basic need for better personal and social behavior is always present and can be more thoroughly understood as the individual becomes more capable in his ability to read effectively the relationship between himself and others as well as the nature of things in his environment which affect his behavior. The knowledge and belief that the kind and amount of achievement tends to become greater when the individuals forming the group give and receive sincere respect and appreciation commands that our first concern be in the area of personality adjustment. With the problem

in mind and a personal philosophy of learning as a guide techniques and procedures can be rightfully and successfully set up.

Experiences in carrying on the business of living democratically must be afforded so that these individuals can learn at first hand how to live effectively in a democratic society. The frequency and the range of frustration patterns which set up fears in the individual can and must be reduced through performance based on understanding.

Anecdotal records kept on each individual's lacks and growth in academic and social skills together with the evaluation of sociometric questions and reaction forms in terms of remedial measures to be applied have a definite place in showing the operation of the child society and reasons for its present state of being.

Interest activities, autobiographies, discussions, sociodramas, diaries and progress charts are activities and devices which tend to serve as outlets for feelings, ideas, beliefs and values and greatly help to temper attitudes and behavior. When all of these are summarized and evaluated individual and group strengths and weaknesses can be pointed out.

A free atmosphere in which ideas, beliefs and values can be looked at, questioned and accepted must be provided. No attempt though, should be made to actually interpret for the individual the standards he has expressed. But through discussion, repeated statements and questions the individual can, in a non-directive way, be given the opportunity to gain an insight into his relationship with his peers. Hence he will arrive at his own interpretation.

Cooperative planning, respect for ideas, parent-pupil-teacher conferences, interest activities, pupil-teacher interviews, visitors, small group work, home visits, will slowly but surely establish rapport among the participants. Thus individual behavior will begin to coincide with the demands of living and the astute communication of social relationship will begin to exist. For it is in communication through attitudes of all individuals that we find one of our greatest hopes of preventing social upheavals in our world. Here is an aid to progress toward a better life.

* * *

June salutes another vacation and they are leaving now. Good-byes are being said. Plans are being made. Smiles of confidence are being easily exhibited. Jokes and comments are being interplayed. They are on their way. Success in this developmental task has been achieved. They have learned to read themselves and others more effectively and to communicate with their world.

Children and Teachers Do "Primary Reading"

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"After knowing this, boy! I wouldn't touch the stuff!"

"What is the fun of getting injected in the veins? You can't taste it. That sounds strange."

"How can a little old piece of dried up leaf make you want more of the plant?" (meaning marijuana)

"Is every school teaching about narcotics? . . . Well, they should be."

"If all children were informed as we are about narcotics, then we could blame the use of narcotics on juvenile delinquency." (meaning use of narcotics by juveniles)

"Why don't we do something to help? (about the issue of narcotics) . . . "Why don't we write to our congressmen? Why not make better laws and see that they are enforced?"¹

The quotations above are from children in a grade six class who had a short unit on the topic of narcotics. The quotations indicate good "primary reading" was achieved by the children and by their teacher. By "primary reading," we refer to the term as defined at this reading conference. Since its beginning Claremont College Reading Conference through the present one, reading has been defined in its broadest terms. The broad definition is presented in the preceding article of this yearbook and will be mentioned only briefly here. An excellent definition is the idea that "reading is a process of making discriminative reactions with regard for all types of stimuli."

We read things, situations and people. Reading of printed symbols is only one aspect of reading. The reading of things, situations, and people and of the interrelationships among these, is the more important type of reading from the standpoint of behavior. This read-

¹Statements made by a group of children in a grade six class, Campus Laboratory School, San Diego, California, 1951. Miss Roberta MacFarlan, Student Teacher.

ing is termed "primary reading." It is fundamental for reading of symbols. Symbols serve only as a means to stimulate the recall of ideas about the actual things for which they stand. If emphasis in teaching is directed toward the goal of stimulating the learner to achieve a high level of efficient behavior for living in our democratic society, there is no line of demarcation between reading of symbols and reading of actual things, situations and people. And, better reading is the product—including better reading of printed symbols. Skills for reading symbols take their rightful place; they implement basic ideas.

Let us develop the procedure through which the children and their teacher did good "primary reading" in their development of the unit on the topic of narcotics. First, let us look at the teacher. After deciding that the topic was pertinent, the teacher did good "primary reading" through identifying the basic ideas that underlie the unit. Among the basic ideas, she sensed the significance of the effects of heroin, marijuana, and other narcotics on the human body. She approached this teaching as a science and as a social problem.² Secondly, she sensed the importance of reading one's self and other people. Her goal was to have the children achieve good "primary reading" through *discovering* the points mentioned above. She was fully aware that "teaching isn't telling," but that it is a process of stimulating the learner to achieve discriminative thinking through which he formulates his concepts. These concepts are instrumental in behavior. The teacher realized the need for excellent "primary reading" of her pupils so that they would sense a problem and react in a desirable, positive way. She sensed the need for stressing ideas and for avoiding all sensationalism that would lead toward her learners wanting to join the bandwagon of a "fad" that has swept many schools. Through good materials and intelligent questions, she stimulated the children to formulate their own convictions. The product of the teacher's "primary reading" is illustrated in the quotations stated at the beginning of this article.

The children's "primary reading" can be evaluated through the following specific outcomes of the short unit. (1) The children had sincere interest and strong convictions that led them to write letters to congressmen, to the state department of education, and after school closed, they wrote letters to the editors of LIFE and NEWS-

²Letters to the Editors, *Life*, 31:5, July 2, 1951. Letter and photograph concerning unit developed as a science and as a social problem.

WEEK when those magazines published articles concerning the topic of narcotics. The desire to do something to help others become informed and to recommend legislative procedures were indications of their appreciation of understanding the topic. (2) The children did splendid "primary reading" of themselves and of other people. They suggested that if you had confidence in yourself that you would not follow blindly into activities such as "trying out marijuana," et cetera. "Some (children) try it to win friends and be popular," and "You shouldn't take anything that is offered by a person like that," are statements that are indicative of their reading of themselves and other people. (3) The children stimulated their parents and other people to think about the issue of narcotics. Such stimulation is a powerful force in our society. "My parents think that this unit on narcotics is wonderful. They didn't know about narcotics until we studied about it." The parents expressed unusual interest and took action in terms of writing letters to the editors of NEWSWEEK and LIFE when those magazines presented articles on the topic. They plan to organize some church and other groups who will "do something" in terms of helping children understand the problem. (4) The children approached the study of narcotics as a science. Any area of experience which is approached as a science has latent possibilities for promoting thinking that is desirable for our democratic way of life.

Let us contrast the type of reading just described with that of inefficient "primary reading" of one's pupils which leads to the pupils being only mildly interested, disinterested, or even negatively interested. This last type of reaction represents the poorest type of "primary reading" that a teacher can do! It is the type of reading that was reported in LIFE magazine when the issue of narcotics was discussed. Adrian Rotundo, the 16-year-old girl, "asked why the narcotic experts did not give students advice directly instead of through teachers who 'yell and scream,' but do not help the children understand the problem."³ Her attitude that teachers "yell and scream but do not help the children understand the problem" is a challenge to every teacher to do an excellent job of "primary reading."

The word *challenge* does not infer that teachers usually do the type of teaching depicted by "yelling and screaming," but that with all teaching there *is* a challenge to help the learner achieve good understanding of the thing being taught. "Understanding of the problem"

³"New York's Children Accuse," LIFE, 30:22, June 25, 1951.

leads to strong convictions, great interest and to the opportunity for intelligent behavior on the part of the learners.

The unit on narcotics is only one area of experiencing, but each area offers similar possibilities for the teacher to do "primary reading." For example, with mathematics, frequently emphasis is upon skills with manipulation of symbols with little consideration of "primary reading." The skills become isolated bits of knowledge that lead to a questionable degree of literacy with the concepts which underlie the skills and even to too little literacy with the computational aspects of mathematics. Studies have been made to test understanding of the relationships which underlie even simple operations. Pupil (both children and adult) responses indicate lack of intelligent understanding—and in many cases misinterpretation—of simple, basic mathematical ideas underlying the computations they have performed for years. "Primary reading" of these calls for experimentation with things and with ideas about things so the learner discovers the relationships. For example, every teacher has the materials at hand to stimulate his learners to discover such ideas as the diameter-circumference-relationship of a circle, side-perimeter-relationship of a square, pint-quart-gallon relationship, divisor-dividend-quotient relationships, et cetera. The first step in this program is for the teacher to achieve good "primary reading."

What are the main factors which underlie good teaching of "primary reading"? We have identified the main factors which underlie such reading during our discussion up to this point, but let us identify them more specifically. Each teacher should evolve definite techniques and specific procedures for the development of these factors.

(1) Reading the behavior of one's self. "Know then thyself" is a beginning point for all of us. Only as one grows in knowing himself—through analysis of his own behavior in terms of what he really thinks and how he reacts—is he in a position to achieve desirable analysis of the behavior of other people. It is through such reading that one is released to formulate a sound philosophy—including educational philosophy. It is the teacher who formulates what he thinks and why he thinks it that doesn't spend too much time "bowing" to attempt to please the superintendent, the principal, the supervisor, and others. This does not infer that the administrators want such activity on the part of teachers; usually they do not! The ones we know respect *ideas* and are delighted when they find teachers who have achieved them.

(2) Achieving good reading of the children in one's classroom underlies all good teaching. A teacher should read the learning situation and each learner in a manner such that release of desirable, discriminative thinking occurs. All teachers do some of this type of reading, but the need for better analysis, better techniques and procedures for achieving such reading is recognized by all good teachers.

Each teacher should read his learners with the goal in mind of changing undesirable behavior traits and of producing continued growth of desirable ones. There are many types of learners. Let us analyze several types. For example, the "yes, yes" type who memorizes readily and agrees readily needs the challenge of *why* and *how* and of *proving his points*. He is the type who gets very good grades in school when grades are based largely upon memorization and following directions. He is the type that Roma Gans discovered achieved high scores on standardized reading tests but was a poor reader from the standpoint of critical thinking. As she stated, many of the children who had high ratings on the comprehension part of the test were found to display "disconcerting gullibility" and lack of discrimination in reading.⁴ The "I don't care" type and the "I give up" type usually demand very astute "primary reading" on the part of their teachers. Reading the reason underlying lack of caring is often a task of considerable dimensions. However, until the learner is released to care, to develop sincere interest and conviction, he is not on his way toward desirable learning. The "I don't agree with you" type who do honest questioning—not the pedantic type of questioning—are usually the real students in the class. These students are difficult to teach—difficult and interesting. They are the type that stimulate the teacher to continue with an on-going education. On the other hand, the "yes, no" type is one of the most difficult to change in terms of behavior. His answer is dependent upon "how the wind blows." He has achieved some degree of satisfaction in riding on the breeze of "yes, no," and he presents a real challenge to the teacher.

With all behavioral types, good "primary reading" demands the reading of the factors and the interrelationship among these factors that underlie the behavior. In the Claremont College Reading Conference, teachers have been stimulated to realize the interrelationship of such factors as nutrition, emotion, vision, hearing, glands, and all

⁴Gans, Roma, *A Study of Critical Reading Comprehension in the Intermediate Grades*, Teachers College, Columbia University Contributions to Education, No. 811. New York, 1940.

factors affecting the organism as a whole. These factors can be separated only in talking about them; they are interrelated in terms of behavior. Thus, the teacher has a large area of concern in which he must do good "primary reading" to interpret the behavior of the learner.

(3) The learner should be stimulated to do good "primary reading" of himself through building his own pressure patterns and taking over the job of reading efficiently and well. The test of a teacher's achievement in "primary reading" is the degree of desirable change that occurs in pupil behavior. Discovering and sensing the needs and identifying procedures for change of behavior is only an initial step. The greatest challenge is to stimulate the learner to achieve fine "primary reading" of his problem. He must sense the problem and formulate procedures for handling it. As he progresses in his reading, he needs further stimulation toward his goal. This should come through his class group, teachers, parents, and others. Evaluation of progress and continuous help in finding desirable procedures toward his goal are needed. These call for careful reading of the learner's situation.

(4) Analysis of the concepts that underlie any given unit of experiencing is essential for good teaching of that area. For the most part, courses of study are outlined largely in terms of skills to be achieved. This is unfortunate; it leads to much teaching that is evaluated in terms of children's performance with skills only. Number of words read per minute, recall of what was read, knowing the multiplication tables, knowing how to add, subtract, multiply and divide, reading note symbols in music, reciting name of things, ad infinitum, are often the things that are the basis of evaluating learning. All of us would readily agree that these skills are important, but they become segregated morsels of knowledge unless they develop out of the setting of good "primary reading."

(5) There is need to analyze the facts and skills that underlie any given area of learning. Only as facts and skills are identified clearly and well can they be taught with any sensible degree of precision. When skills have been sharply identified and grouped into logical classifications, much child-labor and considerable teacher-labor can be eliminated.

Children and teachers do "primary reading." The problem before us is not "to read or not to read," but rather how well do we read! Re-

sults of teaching and the ability of the teacher to do "primary reading" are directly proportional. The range of achievement in reading is tremendous! The range can be identified in terms of the behavioral responses of learners.

There are "teachers who 'yell and scream' but do not help you understand the problem."

"I don't understand what he's talking about, but I don't care."

"She said, 'Don't try it.' Let's do it anyway."

"I think I understand. Let me see if my idea works."

"It would work this way. These things are true; therefore, this is true."

"After knowing this, boy! I wouldn't touch the stuff!"

"Why don't we do something to help? (about the issue of narcotics) . . . Why don't we write letters to our congressmen? Why not make better laws and see that they are enforced?"

Reading the Lighting Environment

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Our body, as it concerns vision and the seeing process, is the result of environment over many generations of development. Men's eyes, since the time of their creation, have been required to work out-of-doors. In such an environment, distant vision has predominated and brightness balances have been those which nature provided. Intensities of illumination were those provided by the sun and the canopy of the sky.^{1 2 *}

For eons of generations, man's visual senses have become accustomed to such an environment and it is only within the last few lifetimes that we have been required to bring our seeing tasks to an unnatural environment indoors.

Evidence of this long existing environment is shown by the fact that the most sensitive color of light acting upon the retina of our eyes is roughly that of the color of sunshine. Also, when we have an opportunity to choose the color of interior surroundings, we are likely to decide unconsciously on those colors which abound so harmoniously in nature.

Further evidence that our eyes are "out-of-door" eyes is shown by modern researches where eye deficiencies are classified by occupation. For example, occupations such as farmers and laborers, who have little demand for near vision and whose work is predominately out-of-doors, show only 20% of the group having visual deficiencies. Whereas, machinists and printers, who work on unnatural jobs using artificial illumination, run 40% to 60% eye deficiencies.¹ Those whose work is indoors under artificial illumination and is critical in nature over long periods of time, such as draftsmen or stenographers, may run as high as 90% as a group with defective vision.

So that we may become more articulate in the discussion of the lighting problems affecting environment, let us define a few of the more simple illumination terms.³

The quantity of illumination (or the time rate of flow of radiant

*Numbers refer to items in the bibliography at the close of this article.

energy over a specific area) is measured by the "foot-candle." It is the intensity of light on the surface, every point of which is one foot away from a standard candle.

Now let us consider the ability of the material of which the visual task consists to reflect the light that is received on its surface. The unit which expresses this ability is known as "reflection factor." It is the ratio of the light reflected from the object to that falling upon it, generally expressed as a per cent. For example, we say that white paper has a reflection factor of 80%, or that the reflection factor of the chalkboard in a schoolroom is 15%.

The remaining definition which we should consider is "brightness."* It is the measure of light that is reflected from a surface. The unit of brightness is the "foot-lambert." The foot-lambert is the product of a light falling on a surface times its reflection factor. For example, if 50 foot-candles of illumination were falling on a piece of paper with a reflection factor of 80%, the brightness of the paper would be 40 foot-lamberts. Or, if a chalkboard having a reflection factor of 15% were illuminated to 50 foot-candles, it would have a brightness of 7.5 foot-lamberts.

Now that we have our illumination terms defined, let us examine the factors of environment, particularly lighting, which influence our visual tasks, and provide ourselves with an understanding of some of the fundamentals of the art and science of illumination. Lighting men have summarized these factors into the four factors of seeing.^{1,2} They are size, contrast, brightness, and time.

When we speak of size in reference to vision, we mean the angle that is subtended by the smallest detail of our visual task on the retina of the eye. Since this is dependent upon the task at hand, and many tasks not of our choosing are given to us, we have relatively little control over it. In printed reading material, it is to an extent the problem of the typographer and printer. Roughly, the minimum size perceptible is one minute of an arc subtended by the visual task at the retina.

The factor of contrast is the next important attribute to our easy vision. Other factors being equal, the greater the contrast of the visual task, the easier it becomes. Or conversely, when the contrast is poor,

*In dealing with light sources, brightness is sometimes measured in candles per square inch. There are 452 candles per square inch to one foot-lambert.³ Since the foot-lambert is almost universally used when dealing with the visual task, we will use it exclusively in this discussion.

discrimination is difficult to impossible. Generally, we endeavor to increase contrast to the utmost to provide easier seeing. For a given contrast, other factors remaining equal, an increase in the quantity of illumination makes for better visibility. For tasks of poor contrast and size, raising the illumination will increase the visibility.

For example, if we standardize the visual task at reading a book printed in eight-point type on good quality white paper, with an illumination of 10 foot-candles as being satisfactory, 20 foot-candles will be necessary for reading handwriting in pencil, 30 foot-candles for reading newspaper text, or 100 foot-candles for sewing with white thread on white crepe cloth where the contrast is very poor, to obtain an equal ease of seeing.²

It is the ability of light to create differences in brightness on our visual tasks that makes possible the selective energizing of our retina so that we can see. And, it is brightness balance and relationships within our entire visual field that is so important in creating an environment of visual comfort.

IT TAKES TIME TO SEE. To evaluate more closely this most important factor of vision, it might be interesting to review some of the work done in the General Electric Lighting Research Laboratories² to determine the relative amount of time used in reading under various intensities of light.

The results were measured electrically with electrodes placed upon the subject in a manner that would record the activity of the ocular muscles. These were electrically recorded upon a moving tape, which gave a record of the process known as an electromyogram of the action currents in certain of the extrinsic eye muscles. An analysis of this most interesting curve will show the number of fixations per line, the reading rate, the duration of the fixations, and the regressions.

After going over several hundred of such tests made under one foot-candle and 100 foot-candles, a complete analysis was made to find the effect of time versus intensity of light on reading characteristics. It was found that reading time per line went from 18 at one foot-candle to 4 at 100 foot-candles, that fixational pauses per line from 5 to 3, and the duration of fixational pauses from 14 to 0. Regressions went from 36 to 32. The tests were made with well educated adults reading under constantly controlled seeing conditions, and the reading material was printed in eleven point type with two points of leading, which is far above the average typography.

Another such test to measure muscular nervous tension while read-

ing, conducted in the Lighting Research Laboratories of the General Electric Company, is as follows. The subjects were instructed to read for thirty minute periods. First they read under one foot-candle of illumination, then under 10 foot-candles, and again under 100 foot-candles. The room environment was unchanged with the exception of the lighting.

A large button was placed on the reading table on which the reader placed his left hand while reading. Beneath the table, unknown to the subject, was apparatus which would measure the pressure of the reader's hand on the button. Also unknown to the subject, recording apparatus was arranged so that a record could be kept of the reader's muscular tension at all times as evidenced by pressure upon the knob. It is significant to note that muscular tension measured in this manner includes the entire system and not the muscular tension in the eyes alone.

This experiment was in progress for one year and included fourteen subjects. Of course, as one would expect, considerable variation was noted between subjects, but when a line was drawn at the geometric mean of the individual data, the results were as follows: At one foot-candle, the average reader exerted 62 grams pressure; at 10 foot-candles, 54 grams; at 100 foot-candles, only 43 grams. In order to establish the authenticity of the test, glare was introduced and the muscular tension immediately increased.

Realizing that this field deserves intensive investigation, the Illuminating Engineering Society Research Fund has made available a research endowment to the Institute of Applied Experimental Psychology at Tufts College.⁵ These investigations are not complete and the reports available from them must be considered as essentially preliminary.

The procedure in this experiment was to seat the subject in a well ventilated, sound resistant room, in a comfortable position for reading. The lighting was from fluorescent light sources and arranged so that the intensity of illumination on the reading task could be controlled from 220 foot-candles down to 0.4 of a foot-candle. This equipment was arranged so that this change in intensity was so gradual as to be imperceptible to the subject. Preliminary tests seemed to indicate that there was very little difference in reading characteristics within the higher levels of illumination from 50 to 220 foot-candles. Therefore, the intensities used on the test were confined from 30 to 40 foot-candles down to 0.2 foot-candle.

The device used in this case to test the muscular tension is known as the "Alertness Indicator." In reality, it consists of a very high gain amplifier having its output calibrated in micro-volts. It is arranged electrically so that it integrates the output potential any given interval of time, which in this case was one second. The integrated potentials are then recorded on a moving tape.

The electrodes are mounted on a head band and when properly placed, measure the action potentials from the muscles just above the eyebrows. Potentials measured at the forehead in this manner also result from a contraction of the facial muscles, moving of the scalp, closing the jaws, lifting weights, squeezing the hands, and in general maintaining an alert visual attention. To test the equipment, the reading task was moved to twice the normal distance and the indications went from 3 to 6 micro-volts. The results of this test indicated that the rate of reading for 10 foot-candles was 14% faster than that for 0.2 foot-candle.

As a result of these preliminary tests a very interesting fact was noted, which was that motivation played a very important part. The reading material was very interesting. In fact, it was so interesting that one of the subjects became so enthralled with the text matter that his visual alertness went up to such an extent as to make his reading rate due to the difference in illumination levels insignificant. Therefore, in his case it was necessary to discredit his test.

Another test was conducted with reading material which, it was felt, would create no excitement, and the reading rate was directly proportional to the amount of illumination. When the illumination was returned to its original level, the rate also returned.

Fearing that the task was too simple and academic, one of the investigators in this experiment took the apparatus into an actual factory to try to corroborate the results.⁸ He measured the production of several tasks. The first was that of a stenographer taking dictation and transcribing notes. In this practical factory environment, it was impossible to change the amount of illumination over a very great extent. The stenographer worked for thirty minutes while the illumination was changed from a low of 9 foot-candles to a high of 25. There appeared to be no significant change in her average muscle action potential. It was concluded that this was due to the fact that she was an experienced stenographer doing her everyday task under the conditions to which she was accustomed.

Another task was performed by an operator who was feeding an

automatic machine. In this case the light was changed from 25 foot-candles to 140, but there was no significant change in her muscle action potential. Investigations indicated that this was probably due to the fact that the machine was going at a constant relatively low speed, much slower than the operator's ability and she did not feel that she was being pushed.

The third test was that of assembly of small parts, specifically that of building starter sockets for fluorescent lamps, which is a hand production job. The illumination was changed from 70 foot-candles to 3, and there was a significant change in both her production and nervous tension. In an average of 48 runs, her time was 20.9 seconds per starter under 70 foot-candles, and 24.1 seconds per starter under 3 foot-candles, thus an increase in production of 15% under the higher illumination. Part of this operation required soldering two small parts, which was a severe visual accomplishment. The meter recorded from 3.8 microvolts to 6 microvolts under low foot-candles, and only 2.8 microvolts to 3.2 microvolts under the high foot-candle illumination, which is a significant change in muscular tension.

The conclusion to be derived from these tests is that a difference in illumination will produce a greater change in muscular tension when the motivation for the task is high, other things being equal. It was also concluded that tests of this character should be confined to the laboratory because the more practical environment of the factory does not allow sufficient control of the variables under consideration.

If one wishes to accept the rate of involuntary blinking as a criterion of tension or fatigue, the following test conducted in the General Electric Research Laboratories will be interesting.¹ This involved one hour's reading of a book with varying amounts of illumination. Under one foot-candle, the blinking rate was 154; at 10 foot-candles, 118; and at 100 foot-candles, 100. This test was also made keeping the illumination constant and changing the color of the paper of the printed text material. For red, the blink rate was 118; yellow, 111; green, 99; and white, 100.

Also, there is evidence that there is a decrease in heart rate while reading.^{1 2} This is affected by changes in the amount of lighting as follows: When reading for one hour under one foot-candle, the heart rate decreased 10%; while under 100 foot-candles, it decreased only 2%.

To this point most of our discussion has been theoretical. It might be well to go into some of the practical applications that interpret

these fundamental theories into our everyday problems of school work.

Since the preponderance of eye defects occur when the student is in the elementary grades,⁴ let us look into the lighting design of a typical elementary school room. We must provide an adequate amount of light, the light must be of high quality to provide a comfortable seeing environment, and the color scheme and interior decoration must be pleasing. Also, one of the most important elements in this highly commercial world is that the entire set-up must be economically sound, and, of course, we must make the maximum use of daylight.

We have developed the fact that environment over many thousands of years has made our eyes "out of door" eyes, and that it has only been the last few generations that we have brought our eyes inside under artificial conditions. If this is true, our eyes are accustomed to daylight intensities. These intensities vary from direct sunlight of approximately 10,000 foot-candles to bright shade of 600 or a 1,000, shade under a tree of possibly 400 foot-candles, or even deep shade on a well shielded porch of 100 foot-candles. Ask the average person where he would like to go to read a book and he will probably tell you on the porch or under the shade of a tree, where he will have somewhere between 100 and 400 foot-candles of illumination.

If this is the case, why don't we provide such intensities indoors? There are several reasons for this but possibly the main one is economic considerations. However, as the lighting art develops, it is possible to more closely approach nature's conditions. Twenty years ago it was common practice to recommend 10 foot-candles for offices and schools. Today, with cheaper electric energy and more efficient light sources, we are able to recommend much higher intensities of light and still keep within economic reason.

The Illuminating Engineering Society, which has many committees who investigate problems such as these, recommend the following intensities of light:^{3 9 10} For service areas, such as hallways, corridors, and passageways—5 foot-candles; casual seeing tasks, as inactive file rooms, reception rooms, stairways, washrooms, etc.—10 foot-candles; ordinary seeing tasks involving discrimination of moderately fine detail with better than average contrast over intermittent periods of time, such as general office work, general correspondence, conference rooms, etc.—30 foot-candles; and difficult seeing tasks involving discrimination of fine detail under poor contrasts and over relatively long periods of time, such as bookkeeping, drafting, transcribing and tabulation, and long periods of reading six to eight point type—50 foot-candles.

It is generally conceded that at the present state of the art,⁹ 30 foot-candles may be recommended for ordinary classrooms, with 50 to 100 foot-candles for sight-saving classes, and intensities in other areas as the criticalness of the work requires.

When we speak of quality of illumination, we mean that we should have lighting that is not only adequately high in intensity, but is also as free as is practical from glare, does not cast harsh shadows, and is distributed over the working area in a manner that will provide maximum comfort.

There is a persistent feeling among lighting engineers that these elements of quality supersede that of quantity. In other words, if one had a choice, it would be much better to provide high quality illumination of moderate intensity than high intensity with bad glare and shadows. GLARE IS BY A LARGE MARGIN THE WORST THIEF OF VISION.

There are two types of glare: Direct glare, which is generally the result of an inadequate control of the light from the sources, and reflected glare, which is the result of poor shielding. Engineers deal with these negative results of lighting by providing equipment with adequate control and shielding, and arranging it to provide proper contrasts and brightness balances.

To illustrate what we mean by brightness balances, let us take the horrible example of the person who reads in an almost completely darkened room with only his page lighted. His central vision focuses on the lighted page but his peripheral vision takes in the dark area of the room. There is, therefore, a conflict in that his central vision is trying to accommodate for the high intensity but his peripheral vision is endeavoring to accommodate to the dark surroundings. This creates a condition which over a period of time can be and actually is very tiring.

Researches indicate^{3 4} that when considering today's recommended intensities for the school room there should not be a brightness difference of more than one to one-third between the task and the immediate surrounding, and not more than one to one-tenth, or over one to ten between the task and the remote surface background brightness. It is understood that these are maximum brightness differences and that optimum conditions would call for smaller differences than these.

If we interpret these brightness balances into reflection factors of the surroundings, assuming the illumination to be constant at about 30 foot-candles, we will find the ceiling should have a reflection factor of 85% (flat white) which helps the efficiency of the artificial light-

ing installation. The wall should have a reflection factor of from 55% to 70% (light pastel shades), and the lowest possible for working surfaces, 35%.

For most visually efficient work, the desk and table surfaces should be clear finished, light natural wood with an isometric wood grain pattern. This will range between 30% to 55% reflection factor. The task brightness may be between 40% and 80%, and the floor between 30% and 15%. This may seem to provide a floor of a very light color and the objection has been raised that it would be difficult to maintain. But experience seems to show that dust and other dirt is as inconspicuous on this type of flooring as it is on the very dark flooring so many times used in school rooms.

To meet these specifications in the design of artificial lighting in school rooms is indeed a critical problem. With the multitude of manufacturers' equipment available, both incandescent and fluorescent, and the tremendously wide selection of lamps possible, together with the varied methods of shielding, a problem of design is presented which definitely falls within the realm of Illuminating Engineering.

The first selection we should make is whether to use an incandescent or a fluorescent system of lighting. This to a large extent is economic. Incandescent lighting is relatively inefficient. That is, considerable electric energy is used to obtain a given amount of light but it is very low in first cost. Whereas, fluorescent equipment is famous for its high efficiency. It is roughly two and one-half times as efficient as incandescent, but on the other hand, it is relatively high in first cost. Therefore, in schools where the burning hours during the day are short and the building is not used extensively at night, first cost becomes a major consideration, and incandescent lighting is indicated.

From the standpoint of glare and shadows, usually an indirect or semi-indirect system is the best. There is a tendency of late to make use of the Silver Bowl lamp for this purpose. The Silver Bowl lamp is an incandescent lamp which is silvered on the bottom, providing its own reflector surface. It has the distinct advantage that it is simple to maintain since whenever you replace the lamp, you also replace the reflector with it.

Although there are several good pieces of equipment utilizing this lamp, there is a tendency, particularly in Southern California, to use what is known as the Concentric Ring fixture. This fixture has a series of concentric rings which shield the bright neck of the Silver Bowl lamp from view, thus preventing glare. Of course, it is necessary

to have a ceiling of extremely high reflection factor when an indirect system is used.

The characteristics to be considered in a system of fluorescent lighting are the adequacy of the shielding provided, the ratio of the up versus the down component of the light emitted from the lamps, and the color of the fluorescent tubes themselves. Shielding can be divided roughly into two classifications: One, those units having a diffusing medium on the bottom, which diffuses the light emitted from the lamp and creates a low brightness because of the diffusion; and the other, which utilizes a system of louvers accomplishing its results by shielding the fluorescent tubes from normal viewing angles. The latter system has the disadvantage, however, that it does not altogether prevent reflected glare, since the fluorescent tubes are not shielded from the bottom. It does have the extreme advantage, however, that it is easy to maintain since the dirt falls right through the louvers.

Probably a system of totally indirect fluorescent lighting would be the optimum installation. However, at the present stage of the art, a satisfactory arrangement has not been discovered to prevent excessive maintenance.

In the matter of distribution of light from the fluorescent tubes, it has been accepted generally, after considerable investigation, that at the present time the optimum unit distributes 40% of the light upward and 60% downward on the working plane.

The color of fluorescent lighting has become a very controversial problem within the last year. This is partly due because so many colors of fluorescent lamps, all approximately white, have been available to the engineer from which to choose. It is generally agreed that the Standard Cool White lamp provides the best color for school room illumination.

The major items involved in the economics problem are the first cost of the equipment, taking into account the number of years of amortization and the interest rate to be applied; the cost of electrical energy from the supplying utility; and the lamp replacement cost. It is customary when making an analysis of the economics of a proposed system to equate the various systems possible on a unit basis. Generally, these are tabulated to arrive at the cost per year per foot-candle per room, or, in other instances, the cost per square foot per year per foot-candle. It is only after such figures are compiled, investigated and analyzed that correct determination of an adequate economic system can be derived.

A typical result from such a tabulation as this is as follows: For a room 23' x 38', using Silver Bowl Concentric Ring totally indirect incandescent units, having eight 500 watt lamps per room, and generating 25 maintained foot-candles, the cost per room per year per foot-candle comes out \$2.30. This assumed installation in an elementary school has 380 burning hours per year, which is only a little over two hours a day, and using 2.2 cents per kilowatt hour for electrical energy.

It must be realized that when designing school room illumination which utilizes both daylight and artificial lighting that the two systems must be designed entirely independently of each other, since when the school is used at night, there will be no daylight.

The fenestration is also a very involved and complicated problem in school rooms. Space does not permit us to go into the design completely; however, a few of the outstanding details might be touched upon. The fundamental principles of handling daylight are the same as they are for artificial light, that is, to obtain good distribution and avoid glare and shadows. The problem of distribution is one of the most critical. In the conventional old-time school room with windows lining one side of the wall, it was not uncommon to have an intensity of light near the windows of 100 or possibly 150 foot-candles, but with the desks on the other side of the room having as low as 5 foot-candles. The problem therefore resolves itself into getting enough daylight on the far side of the room to at least partially even up the intensity of light. This may be done in either one of two ways: Either by bi-lateral lighting, that is, having windows on both sides of the room, or by the use of clear-story windows. With either system of lighting, a foot-candle intensity averaging as high as 50 can be obtained, under good daylight conditions, almost uniformly throughout the room.

Another hazard of daylighting is that of glare. This is generally the result of excessive sky brightness visible to the student, or light reflected from a light colored adjacent building. The most acceptable method of eliminating these undesirable brightnesses is the use of venetian blinds. However, a more scientific approach would be to use prismatic glass structural blocks supplying the upper part of the fenestration which would direct the light to the ceiling to provide an indirect system. Also, it is customary, particularly in California schools, to build rigid louvers outside the building as a part of the building

structure. This system has the definite advantage that since it is fixed, it is not subject to abuses.

On any school design where daylighting is an important consideration, the buildings should be oriented so that the maximum window area faces north in order to avoid direct sun and excessive sky brightness. Also, any fenestration system which utilizes opaque or diffusing control equipment should be arranged so that a "vision strip" is left clear near the lower part of the window at eye level to satisfy the psychological demand to "see out," and to give an opportunity to relax the eyes.

By reporting a few of the several psycho-physical experiments relative to visual tasks under different lighting environments, we have endeavored to indicate that vision is an all inclusive function. It involves the entire human organism. Attention has been called to the four factors of seeing and their relationship to lighting.

We have endeavored to make it evident that to provide a satisfactory seeing environment is an engineering problem of considerable scope, backed with scientific facts.

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Grouping for Reading

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INTRODUCTION

Teaching reading in the mentally retarded classroom has always posed serious problems. This is accentuated at the secondary level where the child has a longer history of failure, complicated by the additional problems of adolescence, and where there is a dire lack of remedial reading material geared to the interest level of this age group.

For many years, the teacher has approached this kind of class as a single teaching unit—the class as a whole, and has developed a real facility in instructional techniques. However, this form of class organization has not yielded adequate results in the remedial situation, and has not solved many of the basic problems inherent in this type of teaching.

Several factors account for this failure. The task of teaching reading to mentally retarded children is difficult and complex in itself, and becomes even more so when applied to the total group. The size of the group prohibits the teacher from giving needed highly individualized instruction, and poses the thus far unsolved problem of utilizing her time, effort, and energy in the most productive way. Also, teacher training at the secondary level has been oriented thus far around subject matter and those techniques of instruction and control that apply to the class as a whole. Since using the total group approach has not proved adequate, this approach to the training of teachers has not aided in solving the problem.

In the face of this problem, the writers feel a new approach must be developed, wherein these obstacles can be removed and results can become more satisfactory both to teacher and to student. We have seen that the problem lies in the nature of the internal organization of the classroom. The answer, then, we feel, lies in the breaking down of the total group into smaller, more workable groups. This form, combined with a greater understanding of group dynamics and their practical application, has aided us greatly in the development of a sounder organizational form and the achievement of more productive content and results in this area of teaching.

We wish to devote this discussion, therefore, to an analysis of the group approach—its nature and specific application—to teaching reading to the mentally retarded class at the secondary level. The article divides itself naturally into two parts: the theoretical basis of the group approach, and the experience of the writers in using the group approach in teaching mentally retarded classes.

UNDERSTANDING GROUP DYNAMICS

The question arises: "Why is it important to understand the nature of groups?" Kurt Lewin and his associates at the Research Center for Group Dynamics (at Massachusetts Institute of Technology) have developed scientific studies of group structure, based on two needs—a scientific and a practical one. There is a need in social science to integrate psychology, sociology, and cultural anthropology into an instrument for studying group life, and there is a need in modern society to develop a deeper understanding and a more efficient and less prejudicial handling of group problems.

What then does this mean to the teacher who knows of the research done in the field of group dynamics but who faces practical problems in the classroom every day? The answer is that the classroom is a structural group situation. From the wealth of experience that teachers have with group situations we can draw functional generalizations that will show how subject matter is influenced by the structure of the classroom. Knowing this we can eliminate the haphazard methods of dealing with groups and can develop a more definitive approach that can relate the structure and function of groups to the specific classroom situation.

Groups at the Physical Level.

The writers have found that a simple understanding of the nature of group interaction is basic to this discussion. A provocative analogy can be made to group interaction at the physical level of the formation of groups of matter, for it is as impossible to describe the group by an intensive analysis of each individual as it is to describe the movement of the sun by describing the movement of every ion in it.

In describing group formation at a physical level, we find that when two particles exist widely separated from each other, their effect is gauged by adding their individual effects. However when we compress these particles closer together we can no longer measure their

effect by simply adding the sum of their individual effects, because an additional factor of the interaction of these particles with each other has been created. This factor causes a striking difference both in the appearance and in the structure of the material, and we find that the effect of this interaction completely dominates the effect of any individual particle. We do not use this analogy to reduce the complex of social relationships to a physical plane, for this would be like adding boxcars and bananas. Also man has a history of previous experience in his group relationships from which prevalent group forms have evolved. However on the basis of the analogy, we can illustrate the phenomenon which occurs when individual students are brought together. Even in a group of two, they have a resultant interaction greater than the sum of their individual effects, for they have developed the additional effect of their interaction. Increasing the number in the group still further, one arrives at a point when the configuration takes on a group nature. This group nature is no longer the summation of the additive effects of the individual students, but has a nature all its own; that is, a group nature or character.

Group Dynamics in the Classroom

How then can a greater understanding of group dynamics help us in dealing with classroom problems? Dolch states:

Most remedial work in reading which has been reported has been done in clinics or otherwise has been done individually. Our known methods are chiefly those of individual remedial work. While there has been much group work, it has not been sufficiently studied. We do not have records of just what has been done and how effective it has been. Thus the teacher who is assigned a remedial group is trying to adapt to a number, that (which) has been developed for use with one. Or she is using standard classroom techniques which were not designed for remedial work at all. Here we may have one explanation why group remedial work has not given the results that individual work has secured. We might be able to get much greater results if successful group methods could be developed. It is hoped that scientific studies will be made of this problem.¹

¹Edward William Dolch, *A Manual for Reading*, (Champaign, Illinois: Garrard Press, 1945), p. 274.

The need for the development of more successful group methods is recognized. The teacher can plan more realistic achievement goals for smaller groups. Smaller groups allow a much higher quality of group interaction and give the teacher the opportunity to become an integral part of the group, to guide it rather than dominate it. Small groups enable the teacher to know each student as an individual and to personalize the relationship between teacher and student to a much higher degree. Small groups involve their members in planning their activities and program, placing the teacher in a consulting role. They create an atmosphere in which the students take individual initiative and responsibility for group enterprises. Students can engage in creative activities with a minimum of the pressure that arises from competition within a larger group. Small groups can effectively create a friendly, informal and democratic atmosphere. These factors provide a far more feasible framework for a constructive approach to the teaching of reading in the mentally retarded classroom.

Survey of the Literature

Generally speaking, the literature is inadequate in terms of the needs of the teacher in this field. A review of the literature shows that very little has been published in the field of teaching reading to the mentally retarded classroom at the secondary level. There is little reference to grouping for reading at the secondary level, and still less for grouping for reading within the mentally retarded classroom. Although the twenty-fourth and thirty-sixth yearbooks of the National Society for the Study of Education are devoted to reading, the question of teaching reading to mentally retarded pupils is ignored completely.

The few recorded discussions on the desirability of grouping are couched mainly in terms of the entire class as a group, and the consensus of opinion is that this type of class organization is unsuitable for remedial instruction. For example:

The advisability of attempting to give group instruction in reading and related subjects to students who have failed in reading for so long a period is questioned. . . . It seems from these results that a policy of attempting to teach reading and possibly related subjects in the classroom to the boy who has failed for six to seven years is doomed to failure.²

²Charles L. Vaughn, "Classroom Behavior Encountered in Attempting to Teach Illiterate Defective Boys How to Read," *Journal of Educational Psychology* XXXII (May, 1941), p. 350.

And again: "The teacher must realize that there is no efficient way of teaching reading to a class as a whole."³

Few solutions to this problem are offered in the literature. On this subject, McCallister states that

Group teaching, even in a restoration class, is not apt to be successful in correcting a reading disability. A diagnostic study is required, followed by special methods of individualized instruction designed to build up the deficient part of the reading process.⁴

While such highly individualized procedures as this one might be feasible in a class of four or five pupils, the approach is unrealistic and impractical when the actual classroom size is much larger.

In an unpublished masters' thesis, Auerbach also finds that the total group approach is not feasible and suggests dividing the class into three ability groups. The period is split into three equal parts: oral work, silent reading, and study. The schedule would be rotated so that the teacher spends one-third of the period with each group.⁵

Since most of the literature deals only with the individual or clinic situation and since there is a severe lack of material on grouping in the mentally retarded classroom, it behooves the teacher to gain a thorough familiarity with that research which is available on grouping in the regular classroom.⁶

GROUPING WITHIN THE CLASSROOM

Deficiency and Retardation

Before discussing specifically the approach to grouping and its application in terms of practical experience to the problem of teaching reading to the mentally retarded classroom, there is one fundamental factor which must be considered. This factor is the existence in the classroom of both mentally retarded and mentally deficient students,

³Luella Cole, *The Improvement of Reading* (New York: Farrar and Rinehart, Inc., 1932), p. 22.

⁴James M. McCallister, *Remedial and Corrective Instruction in Reading* (New York: D. Appleton-Century Co., Inc., 1936), p. 12.

⁵Eugene C. Auerbach, *An Inquiry into the Methodology of the Teaching of Reading to Mentally Retarded Pupils at the High School Level* (unpublished masters' thesis, the University of Southern California, Los Angeles, 1949).

⁶One of the more interesting of recent articles on the field of grouping is the following: Max Birnbaum, "Group Guidance Through the Social Studies," *Social Education*, May, 1950.

and has vital implications for the teacher. A mentally retarded child is one of "normal" intelligence whose mental development has been held back. A mentally deficient child has below "normal" mental capacity due to an incurable condition. The teacher must remember that while the mentally deficient pupil has set limits in terms of his development, the mentally retarded pupil must be viewed as a remedial situation with a potentially "normal" development. Teaching methods must take into account the basic difference between these two classifications.

One of the obvious problems facing the teacher in this regard is the difficulty of distinguishing between the deficient and the retarded, since their outward appearance and behavior may be very much the same. The question is further complicated by the possibility of misclassification due to cultural and environmental factors. For example, a disproportionately large number of children in the classes for mentally retarded in Los Angeles are Mexican-American. These Mexican-American children are particularly handicapped in their academic work. Their position of conflict with the dominating "Anglo" culture is clearly reflected in the following quotations:

Seventh Grade Mexican girl: "Oh, my, if they start punishing us for speaking Spanish at that school I'll be getting it all the time, everywhere. My parents punish me whenever I say a word in English."

School superintendent: "Until the Mexican children learn to speak English we have no alternative but to segregate them."

Mexican youth: "They laughed at me when I talked English because I mispronounced some of the words; so finally I got so I didn't dare open my mouth in school."

The picture is rounded out by the following remark made in one of the writer's classrooms by a thirteen year old Mexican-American boy: "Why should I do good in school? My father came here twenty-five years ago from Mexico. He started working then washing windows for the Santa Fe. Today he is still washing windows for the Santa Fe. When you're a Mexican-American, there are only certain jobs you can get."

Since valid criteria for distinguishing the retarded from the deficient have not been developed, the teacher should consider this a special

⁷Ellis M. Tipton, "One Means of Improving Mexican-American Relations," *Claremont College Reading Conference*, 1944, pp. 160-67.

problem. Some of the things which she can do to help meet the needs of this situation are as follows: First, teachers need to understand the capabilities of each student, so that goals are not set too high. In this regard, it would be helpful if teachers kept anecdotal records on children so that over a period of time a clearer picture of just what the child should be expected to do will emerge. Secondly, teachers should be willing to experiment with groupings and should try to find the approaches best suited to her particular class. Also the teacher should utilize the special abilities that deficient children may have. Since the deficient child can adjust socially, efforts must be made to find a niche for such a child through utilizing the social dynamics of a democratic classroom organization. Here it should be noted that individual success in the group can often be achieved by interchange of status roles. Everyone in the group should have a job to perform that has value to the group as a whole. Finally, teachers should keep up with the literature. Although the published material on the question of differences between the retarded and the deficient is inadequate and often hazy, more attention to this question in the future is likely.

Adolescence

Another factor not yet dealt with is adolescence. The primary consideration that should be made is that peer approval is most vital in this age range. Many of the grouping approaches, particularly when the teacher is removed as the dominating force, rely upon the high value adolescents place on the approval of their peers.

Adolescence is that turbulent period of emotional and physical readjustment where the child has a vital need for assistance. The mentally retarded child thus has an additional problem at adolescence, when the now greatly increased need to be the same as other children is contrasted with the stigmatization society has placed on him. Just at the time when the adolescent feels the need for conformity, the full weight of societal disapproval begins to be realized.

Permissive-Acceptance

With these two factors in mind, we turn now to dealing with the nature of the mentally retarded classroom and the necessity of developing a special approach to it. In discussing how to teach reading to mentally retarded pupils, we must keep in mind the background of experience with this skill such pupils bring to the reading situation.

This experience is invariably one of failure and frustration, and is often coupled with a history of pressure from teachers trying to force reading, resulting in withdrawal from the reading situation. Rejection or censure by teachers, classmates, or parents, because of inability to read adds fuel to the flames. Add to this picture the morale-shattering effects of years of failure plus inability to cope with the problems of adolescence, and it is easy to see that the mentally retarded pupil on the secondary level is likely to harbor intense feelings of hostility toward the world in general, and reading in particular. This hostility may manifest itself in withdrawal, passive resistance, or "discipline" problems. With the foregoing background, it is not likely that these pupils will make much progress with reading "techniques" until they are in a frame of mind to accept reading itself.

Thus, release of hostility is important to successful remedial work in reading. However, a teacher-dominated classroom is not conducive to the demonstration of such feelings. In order to give the pupil an opportunity to express hostility, it is necessary to create a permissive-accepting atmosphere. By "permissive" we mean the pupil may do or not do anything, within certain reality limits. Specifically, "permissive" means that the pupil may or may not read, according to his desire. It also means that the child goes at his own pace, and may resist reading, openly or passively. If the child is openly hostile, the teacher does not praise, censure, or condone; she simply accepts.

It should be kept in mind that the limits set will depend on the purpose of the group activity. Also, limits are necessary since pupils, like all of us, will feel insecure when they have unlimited freedom. Then, too, we do not aid social adjustment when we create a classroom situation divorced from reality. Therefore, a pupil can not be allowed to throw the class into chaos, nor disrupt the work of the entire group.

To "accept" the student, the teacher must "start where the child is" as far as reading level is concerned, and in general accept the fact that the student *is* retarded. It is imperative that the teacher not reject the pupil because of his retardation, non-conformity with standards of behavior of "regular" pupils, or cultural background which may be different from that of the teacher or other pupils. In this regard, it is particularly important for the teacher to understand the environment from which her pupils come.

In creating a permissive-accepting atmosphere, the teacher should set the tone of the situation—a warm, friendly, but purposeful one.

This tone will settle the group, influence the behavior of the pupils, and therefore be reflected in the quality of the work itself. It is important to remember that while the group may influence the choice of what to do, all choices presented by the teacher should lead to reading. In other words, the path may zigzag a little, but the basic direction, toward reading, remains the same.

One of the benefits of a permissive-accepting atmosphere is that most pupils will release their pent-up feelings of hostility if an atmosphere conducive to such release is consistently maintained. Story-writing, choral reading, skits, and other creative activities provide outlets for self-expression. When the child recognizes that the teacher *accepts* him as he is, he will have less need for such defense mechanisms as compensation, identification, projection, and rationalization. Then, the pupil's self-expression will take on a more constructive character. Many "discipline" problems in the classroom may be due to a combination of frustration plus inability to "fight back" against failure.

Another advantage of a permissive-accepting group atmosphere is that pupils find security in being in the reading situation with others of approximately the same level of disability. The pupil can accept the group standards because these standards are within his range. Pupils who withdraw from reading because of the fear of making mistakes (and fear of former ridicule), will be more willing to chance errors when they are in a permissive group of pupils of their own level *who are just as likely as they to make mistakes*.

Being accepted by the group gives the student badly needed status, which can help remedy the emotional instability that is characteristic of the mentally retarded pupil.

Gates and Pritchard report success in using the permissive approach at the Speyer School in New York City. Their approach emphasized absence of pressure, a good deal of motion and activity, use of spontaneous subject matter, a relaxed classroom atmosphere with a minimum of teacher-domination, and development of materials utilizing the experience and related interests of the students.⁸

Axline achieved good results with poor readers by utilizing a permissive-accepting approach, also.⁹ Although her work was not done

⁸Arthur L. Gates and Miriam C. Pritchard, "Teaching Reading to Slow-Learning or 'Dull-Normal' Pupils," *Teachers College Record* XLIII (October, 1941-May, 1942).

⁹Virginia Mae Axline, "Non-Directive Therapy for Poor Readers," *Journal of Consulting Psychology* XI (1947).

with mentally retarded children, the rationale—that emotional maladjustment must be ameliorated before effective reading instruction can begin—is particularly applicable to this study.

The writers recognize that it will not be an easy job for the teacher to create a permissive-accepting atmosphere in the classroom. However, because of its prime importance, teachers should introduce as much permissiveness as possible.

Clinic Experiences

Grouping for remedial reading has been used successfully in the clinic setting at the Reading Clinic of the University of Southern California. Two techniques used by one of the writers at this clinic are particularly applicable to teaching in the classroom, and can be adapted for use with the mentally retarded.

One type of group reading experience that has proved successful in the clinic situation with remedial reading cases is the story-writing method. In this approach the pupils and the teacher sit informally around a table, and as the pupils dictate the story, the teacher types it up in sufficient carbons to provide a copy for each.¹⁰ The story is then read by the group. The teacher can utilize the story for work in speed or comprehension, but should make such work as much of a game as possible. For example, if increased reading speed is desired, the following procedure might be followed:

- a. Pupils read orally their own contribution to the story until familiar with it. (Teachers find that pupils read their *own* stories much more easily than those in books.)
- b. Each pupil reads own contribution orally as fast as possible (as if running a race).
- c. Whole group reads each contribution as fast as possible.

The content of the stories will vary with the interests of the group, and range from "Where I Would Like to Spend My Summer" to "private-eye" detective thrillers.

The foregoing suggestion is just one of many possibilities the teacher's ingenuity can devise for combining drill and fun. The story-telling situation itself could be called a Hollywood story conference,

¹⁰If the teacher does not type, she can use a hard pencil and write out the story, using carbons.

with place cards for "director," "assistant director," "story analyst," "script writer," and "talent scout."

In using this method it is important to remember that while the teacher may participate as a member of the group in writing the story, she must not dominate the selection of materials, nor insist on perfection in grammar, continuity, or story form.

One of the benefits of the above method is that pupils read material that is both interesting to them and phrased in words they can easily recognize—their own. Thus the possibility of a pleasant, successful, reading experience is created. Developing reading for pleasure is as important in remedial reading as it is in a regular reading program. Particularly for the mentally retarded pupil, "the best experience is a successful experience."

Another advantage of the story-telling technique is that the teacher can diagnose the reading difficulties of each pupil by making notations, on her copy of the story, of errors pupils make as they read.¹¹ In addition, the content of a pupil's contribution plus his reaction to the situation, may offer a clue that might be helpful in understanding the emotional problem involved. The latter point is important when there is dramatic content in the story, or when the story is acted out in dramatic form, such as a radio script or play. If the atmosphere is permissive, some significant release of feelings may take place.

In addition to release, the pupil can gain status through group acceptance of his individual contribution to the total effort. Here it should be noted that non-readers can gain status without actual reading, by verbalizing a contribution to the story.

Another group reading method found valuable in the clinic situation is the combining of handicrafts with reading. This can be done in a number of ways. One suggestion is to type instructions, preferably on individual cards, for making some specific object, such as a key case. After the teacher demonstrates the way the object is made, the students make their own, following the typed instructions. Other possibilities include labeling materials and equipment, and making a list of responsibilities for each pupil in getting materials, using equipment, cleaning up, and so forth.

The rationale of this approach is that motivating reading through interest is essential in working with the mentally retarded pupil.

¹¹A system of notation, such as used in the Gray Oral Reading Test (Public School Publishing Co., Bloomington, Illinois) is suggested.

Most teen-agers are interested in making something like a key case or a gadget for the family car.

One of the values of the handicraft approach is the therapeutic benefits of working with the hands. Also, the pupil can gain approval and recognition from the group (and from the teacher, who is an integral part of the group) by turning out a good piece of work. Apparently, many mentally retarded pupils can do a better job in crafts than in academic work.

Important also is the possibility of building good social attitudes and group spirit as the pupils share tools, materials—and experiences. The feeling of belonging can lend a measure of stability to the emotional life of the mentally retarded adolescent.

There are two other advantages in both of the clinic experiences described. First, since there is a shortage of good reading material for the mentally retarded at the secondary level, original stories and handicraft instructions help fill this gap. Secondly, where students have failed in reading through the formal approach, it is important to make the remedial program as informal as possible.

Classroom Experiences

The writers, in their teaching experience in the Los Angeles schools, have utilized several methods of grouping in teaching remedial reading to mentally retarded pupils at the secondary level. Six of these techniques are described below, with examples of their specific application.

The Buddy System. The smallest group within the classroom is the group of two pupils, called buddies. Many experiments are being conducted with this system in the Los Angeles schools. One of the more interesting variations of the system is to get the buddy from outside the classroom. Here, a high degree of selectivity should govern the choice of the helper. It is important that a buddy express a desire to do the job, and should be a youngster with a high frustration tolerance. Another consideration is to find a student who is socially acceptable to, (or even better, looked up to) by the boy or girl being helped.

The use of children to work with other children can be successful if a few simple principles are observed:

- a. Never permit a child to help another one if he himself can derive no learning from his teaching assignment.

- b. Make all drill periods brief.
- c. Follow all drill periods with an activity that necessitates application of the skill practiced.
- d. Vary the drill activities as much as possible.¹²

In the classroom where the teacher has non-readers, the system is particularly useful. A fourteen-year-old girl non-reader, when approached by one of the writers with a reading readiness book, burst into tears and said, "No, that's kid stuff." However, when the non-reader was selected as a buddy by a fourteen-year-old girl who reads at the fourth grade level, she ran right through the same book. Thus, recognizing that there are few if any books at the social maturity level of the secondary school non-reader, it becomes important that peer approval be utilized to overcome this handicap.

One of the methods used by the writers for making students aware of their progress is to chart and post the reading improvements of each buddy team. The buddies are given two grades, one for their individual work and one for progress of their team.

The buddy system rewards the helper through instruction in leadership gained by closer contact with the teacher. In addition, an intensive review of the material aids the helper in speed and word recognition. A further reward is observing the progress of and taking pride in the achievements of one's buddy.

The buddy system relies on peer approval for control, and removes the teacher from the authoritarian setting, placing her in the status of an advisor. It is interesting to note that this system is being used in teaching the mentally retarded in New Zealand.¹³ There are many variations possible with this method and the results obtained indicate that the teacher is well rewarded for the investment in time and effort in establishing the buddy system.

Small Group Reading. There are some students in the classroom for the mentally retarded who are more advanced in reading than others, and we harness this better reading ability in a constructive manner. These students are assigned roles as group leaders or "captains." Much depends on the quality of the work of the group leader,

¹²William Kottmeyer, *Handbook for Remedial Reading* (St. Louis: Webster Publishing Co., 1947), p. 144.

¹³Ralph Winterbourne, *Educating Backward Children in New Zealand* (New Zealand Council for Educational Research, 1947).

and the teacher will find it necessary to set aside special time during the week for an exchange of their experiences and problems.

A class of sixteen students, for example, is divided into four groups of equal size, with a captain for each group. Each group has special reading seats, in the four corners of the room. The group captain starts the reading, the next student follows, and so on. The group captain functions as a teacher as well as a member of the group, and keeps the work going, corrects errors, and helps the other students when they run into difficulty in the reading.

Each group is encouraged to function at its best by friendly competition with the other groups. For example, if all students are reading the same material, group one may ask a question of group two about the story being read. Group two then asks a question of group three, and so forth. A right answer counts one point,—and the game is on.

At this point the teacher may ask, "But what about the non-reader, or those barely able to read?" A special group can be organized for these students, with the teacher as captain. Since the other groups soon learn to proceed on their own, the teacher has more time to devote to this group which is the one needing the most attention.

Small group reading accomplishes the following:

- a. The student who reads poorly will be more willing to read in smaller groups than before the whole class.
- b. The individual student reading orally in a class of sixteen gets one in sixteen chances to read; within a group of four the opportunities are one in four. Therefore, the pupils get more practice.
- c. The group captains develop more rapidly because of their special role.
- d. The pleasurable aspect of reading is stressed through the friendly competition between the groups.
- e. The teacher is free to work with one group at a time. This provides for more individual attention, as well as providing more time for the teacher to spend with the slowest group.

Ability Grouping. One of the most common methods used in the establishment of a grouping system is to base the groups on the ability differentials that exist. Ability grouping also utilizes some of the aspects of the buddy system. In setting up this group situation we may

make a broad classification as regards reading level; those who have not yet reached third grade reading, and those above it.

In order to separate the class into workable units, we divide the class longitudinally, that is one group on the right side of the classroom and the other on the left side. This arrangement avoids the stigmatization attached to the traditional horizontal grouping, where the poor readers are placed in the back of the room.

In the slower of the two groups, each reader is paired off with a buddy. These sub-groups of buddies are in friendly competition with each other and a progress chart is kept. Such items as number of words in the word-box file, are charted by the sub-groups themselves. Each week the best sub-group is declared "champ," emphasis being placed on the fact that the "champs" accomplished their success by collective effort.

The group of readers above the third grade level is divided into two teams, with a captain for each team. The function of these two captains, who are the best readers in the class, is to guide their group when the teacher is busy with the slower group.

Because of space limitations we will not deal at length with the reading activities of the groups under this system. However, we would like to indicate briefly one of the directions such action can take. One of the most practical and satisfactory systems thus far developed is the method being used experimentally at the junior high level in the Los Angeles City Schools, under the direction of Helma B. Coffin, Supervisor, Junior High School Education Division. Under this system, a work book that is supplemental to a text used in the class, is issued to each student. The exercises in the work book proceed from the simple (kinaesthetic tracing) to the more complex exercises (creative sentence construction).

Skits. In their classrooms for the mentally retarded, the writers have seen a high level of interest from the student in the teacher's reading stories to the class. One of the books that the children were very enthusiastic about was "Many Moons," by James Thurber. After the story was completed, the class listed all the characters and reviewed the plot. When the teacher brought in a play he had written based on the story, the children were elated and were very vocal in their desire to portray various characters. With a high motivation for reading developed, the three-page mimeographed play was distributed and the casting of characters begun.

If the teacher utilizes her ingenuity, she will find that a successful group experience can be developed around the skit technique. Some grouping divisions we have used are: two casts for each page, a different cast for each page, and different casts for the whole production. Evaluation follows each cast's efforts, and on a comparative basis the most desirable qualities are highlighted. The orientation of this method is a successful group experience based upon a high level of group interaction.

When the casts are being selected, the teacher respects the voluntary desire to portray various parts. It was interesting to note that the very slow readers, because of their desire for a part, took their parts home and learned them. The non-readers became the technicians and handled the sound effects, while some of them played small parts which they had taken home and memorized. It was here that the introduction was made to the reading chorus by having a few choral parts that the whole class chanted in unison.

The skit technique is demonstrated to the children by having them compare the original story with the skit written by the teacher. Thus, the foundation is laid for the students to create their own skits, similar to those described in the clinic experiences. Skits can also be developed from dramatic play or taken functionally from some part of the social studies lesson.

Students show much interest in the reading of the skits because the material is either in their own words or at their reading level. Another value of the approach is that the problem of securing suitable reading materials is partially solved. In addition, when the students read dramatically they are developing skill in phrase reading, the reading of meaningful wholes, and are increasing reading speed.

Another device which welds the group spirit with the flux of dramatized words and ideas, is charades. The technique is to have each individual write out an idea to be dramatized, and for the opposing team to guess the idea that is being acted out. Words take on real meaning, and subject matter and concepts become vividly real, when they are associated with action and interpretation at a level common to the understanding of the children.

"Baseball." One of the time honored games used in the classroom is "baseball." In this game, we divide the class into two teams or groups. One team "pitches" questions, the other team "bats" answers. The teams take pre-arranged "baseball" seats; these add status to the game.

Questions for pitching are prepared by the students on both teams. It might be interesting to note a few of the rules:

1. A hit is scored by answering a question correctly.
2. The successful batter is allowed to get on "base" (a corner of the room).
3. Further hits send batters around the bases, eventually scoring runs.
4. "Outs" are made by answering incorrectly. Three outs retire a team each inning.
5. When three outs have been made, roles of pitching and batting are reversed.
6. The teacher may umpire, or each team may have one of their members keep score of runs and outs for their own team.

Some of the benefits, both in the sense of group interaction and reading, are as follows:

1. Reading becomes a *game*, a never ending source of "baseball" questions. Questions have been taken from the reading, so that the game serves as review and stimulus for more intensive reading.
2. Interaction takes place between students of each group as questions are written up. In addition, the student takes this opportunity to clear up hazy points.
3. The student soon develops a group spirit—of belonging to the team.
4. Non-readers may seek the aid of a "buddy" for help in preparing questions.
5. Those students with the most serious reading problems may, at first, be utilized as timekeepers, scorekeepers, team managers, etc.—all of which are "status" positions.
6. "Baseball" is a useful review device; flashcards of word recognition may be used as "questions," as well as spelling words, and so forth.

Choral Reading. Choral reading is almost as old as reading itself. It is interesting to note that the ancient Greeks found choral reading one

of the best ways to narrate action in a static setting. In the school situation, choral reading engenders high motivation for reading. As important, are the social benefits, which include increased self-confidence, social understanding, and group cooperation.

The writers have not found it difficult to create their own choral reading productions for the mentally retarded classroom. It is important to remember that the vocabulary level must be kept low, and that each student should have a mimeographed copy of the production.

In choral reading, the emphasis on the need for rhythm is paramount. In this regard the writers have utilized sea chanteys and work songs for choral productions, since rhythm is the most important element in this type of singing. In addition to the actual reading, a feeling of working together to accomplish a group goal can be achieved if the students act out the production as they read. For example, in reading a capstan chantey,¹⁴ the group in unison could pull a heavy weight attached to a rope.

The group breakdown in choral reading is functional, both in terms of fitting each individual into the group pattern, and also in adapting the activity to the different levels of reading achievement. For the low level readers, a special part can be created with the most elementary vocabulary level. Non-readers can be utilized to reproduce certain sounds that do not have to be written out.

Many group formations are possible with this technique. For example, there is the folk "leader-chorus" dialogue, where one or two students present the main ideas, and the chorus replies. There can be one leader and two choruses; or two counter-posed choruses without a leader (as in the chant and reply).

The writers have found that the groups soon tackle the reading production as a *group* problem, and that group constructiveness and interaction are at a peak in this activity. Enthusiasm can be built up to the point where students will ask to take home their copy of the production in order to practice and improve their contribution to the group.

CONCLUSION

This article has dealt with the group approach to teaching reading in the class for mentally retarded at the secondary level. The approach of the writers to the problem was that a change in class organization

¹⁴A capstan chantey was sung as the sailors, working in unison, wound up the anchor around a fixed post on the deck.

was necessary to solve the problems inherent in attempting individualized remedial instruction in a whole class setting. The results achieved through the experiences described lead to the conclusion that the small effort required to change class organization will yield gains in reading not possible through whole class activities.

Before setting up reading groups, the teacher would do well to review the literature on group dynamics. Also, the teacher can draw much of value from her own varied experiences with grouping, keeping in mind that the class as a whole is a type of group itself.

In conclusion, we would like to point out that the teacher can both gain from, as well as contribute to, the study of group dynamics. In so doing, she will have made a valuable contribution to the articulation of the social sciences.

Providing Maximum Opportunities for All Students to Learn to Read the Printed Word Commensurate with Their Individual Capabilities

MRS. ETHELYN WIEDA

Coordinator of Special Services, Compton Secondary Schools

The newer media of mass communication—television, motion pictures, and the radio—have undoubtedly influenced the behavior of our school population. In fact, it appears in some instances that such media have conditioned our students against the older medium of mass communication—the printed page. The report that follows deals primarily with an effective reading program for all the students in our high schools.

The Compton Union Secondary Schools are attempting to improve this older medium of mass communication by establishing a reading program which includes developmental reading at all grade levels, remedial reading classes, a reading clinic, and special functional reading classes for the mentally retarded student.

An Outline of the Compton Union High School Reading Program

1. Developmental (Regular English classes)
 - Superior
 - Normal
 - Slow learner
2. Remedial (15-20 in class)
 - High normal
 - Superior (By individual intelligence tests)
3. Clinical (20 students)
 - Superior (By individual intelligence tests)
4. Functional (18 maximum)
 - Mentally retarded (By individual intelligence tests)

DEVELOPMENTAL

Developmental reading is handled in the regular English class. One can readily see that the bulk of our students falls into this class. A unit on reading is included as part of the curriculum in all grade levels. At least one teacher is responsible for providing opportunities necessary for the student to maintain through purposeful use the skills, abilities, attitudes, and habits previously acquired by the student, and also to extend and refine his skills, abilities, attitudes, and habits. By such a plan, provision is made for the continuous growth in reading throughout the secondary school years.

Reading is emphasized in the English class. However, other competent subject-matter teachers are also teaching reading. Last year it was our Social Studies Curriculum Committee that requested a Reading Workshop to aid them in teaching more effectively. A series of eight meetings was planned in order to acquaint the social studies teachers with the basic principles of a reading program at the high school level. Secondary teachers are becoming increasingly aware that each area of learning has a peculiar vocabulary and style which require specific techniques. All teachers must be teachers of reading.

Because of the wide range of student's reading ability, it is most important that the English teacher be aware of the reading weaknesses and strengths of the students in her class in order that she may provide her students with properly graded reading material. In addition to the reader level, she must know the mental ability of each individual in her group. The teacher must recognize the reading needs of her students, and thoroughly explore their interests. For constructive reading instruction, an adequate diagnostic testing program is essential. It is possible that even the gifted child may have reading disabilities in certain areas.

There is no need in my delving further into the Developmental Reading Program as many articles and books have been written on this topic by authorities in the field of reading. However, I would like to recommend the bulletin, "Improving Reading Instruction in the Secondary School," Volume 16, Number 1, May, 1947, published by the California State Department of Education and prepared by the Southern Section of the California State Committee on Developmental Reading.

REMEDIAL

The remedial reading program is that program which is based upon the careful diagnosis of individual needs and is aimed at the correction of specific difficulties.

The administrators in the Compton Union High School District are aware of the increasing numbers of students at the junior high and senior high school levels who are handicapped by a lack of reading facility. Special classes are being set up with an enrollment limited to twenty.

Identification of those students who would profit from special help in reading is the responsibility of the teacher, the psychometrist, and the counselor or vice-principal responsible for program changes. Students who have demonstrated a marked lack of reading ability in the school room may be referred to and examined by the psychometrist for reading level and performance ability. Those students who have normal or above normal performance ability but who read between the third and fifth reader level may be admitted to a remedial class. The majority of the cases can be screened successfully by administering the Dolch Basic Sight Word Test and the Healy Pictorial Completion Test II. Borderline cases are tested more completely if there is a question about possible placement. Within the reading classes are subdivisions of smaller groups working together at their respective levels. Success within these groups depends upon the independent drive and spontaneous reactions of the students. Dull normal and slow learners do not, as a rule, demonstrate this ability to follow through on a difficult problem.

Every period of remedial reading should include the following five phases of instructional procedure:

1. Determine the reader level of the student and begin at that point.
2. Introduce and maintain a controlled vocabulary in an experience lesson with meaningful content.
3. Use an established method of phonetic analysis of words.
4. Plan for recreational reading (easy and fun reading).
5. Plan for each student to feel confidence and success.

Below are seven students who were in a remedial reading class in one of our junior high schools. Only seven were enrolled in this group because an interested teacher was devoting her free period to helping these students.

Names	C.A.	I.Q. C.T.M.M.	I.Q. Healy	Dolch Reader Level
			# 2	
Bill	12-5	84	167	2nd reader
Rush	13-3	114	158	3rd reader
Jim	13-11	90	132	3rd reader
Steven	12-7	90	174	3rd reader
Myrlean	13-1	94	144	3rd reader
Donna	12-9	105	95	3rd reader
Bob	13-5	85	182	4th reader

These students were just entering the seventh grade. It is necessary to begin with a careful diagnosis when we have a group of individuals whose reading disabilities are as marked as these students. In our system, remedial classes are begun by giving individually the Dolch Basic Sight Word Test, and the reader level of each student is determined by the tables found at the end of this paper. This test not only helps the teacher to determine the correct reader level but also the types of errors the student is making. Instruction can then be given along the needed lines. The errors may be reversals, looking only at the end of a word, looking only at the beginning of a word, or an inability to sound letters. Now that the level of the basic series reader has been determined, the ingenious teacher listens for an interest common to the group; such as a school assembly or a football carnival. At the beginning of a school year the group may have no common interest. The teacher of such a group develops an experience lesson in the following manner.

A teacher knows that boys and girls who cannot read miss many of the wonderful and exciting phenomena found within our universe. Both sexes enjoy experiments in the field of science. For this class, the teacher enlisted the aid of a junior high school science teacher who was willing to perform an experiment on air pressure. Air pressure may seem an abstract topic for twelve and thirteen year-olds, but to the boys and girls who witnessed the experiment it was a real force which they understood and appreciated.

Bill, one of the seven remedial students, found it impossible to stay for the experiment because of the school bus schedule. The following day the other six students outlined the main points of the experiment in order that Bill could perform the same experiment at home. This is the experience story which was developed by the group and written on the board by the teacher.

Air Pressure And What It Can Do

1. Get a varnish can with a small mouth.
2. Put a little water in the varnish can.
3. Set the can on the flame long enough for the water to boil and form steam. The steam drives the air out of the can forming a vacuum.
4. Put a stopper in the mouth when most of the air has been driven out.
5. Take the can off the flame. Cool the can with cold water. This makes the steam condense leaving a vacuum. The can collapsed.

enough	flame	form
steam		condense
varnish		collapsed
vacuum		mouth

The above words are those with which the remedial class had difficulty as they read the experience story point by point. Only 11% of the words gave difficulty. The teacher must always remember to keep the vocabulary simple and in meaningful content. To a twelve-year-old boy with a second reader level, this story contains meaningful content compared with a story from the *State Series*, "The Duck Suit." To provide a wider variety of materials, a teacher often combines the experience story with a basic reader. Great care should always be exercised to never use a text on which the student has previously failed. The experience story may be typed by the teacher and returned to the students as a group story, or the individual students may copy the lesson from the board into a special notebook.

This remedial teacher combined phonetic instruction with the reading of the experience story. Since these nine words caused difficulty,

the group sounded the initial letters of each of the words. Attention was called to the rule that if a short word contains two vowels the first vowel is usually long, as in "flame" and "steam"; the small word "for" within the longer word "form" was pointed out; the blends "st," "fl" and "th" were said aloud so that the students could both see and hear the sounds. The teaching of phonics should always be used in an actual reading situation in order that it may be accompanied with the aids of context and configuration. Boys and girls as seriously retarded as these seven remedial students need to use every possible device to develop independence of word recognition.

Jim had difficulty in recognizing the word "collapsed" until the teacher developed with him the tracing or kinaesthetic method. After three tracings under the teacher's guidance, Jim mastered the word. With the kinaesthetic method, a student writes much of his material in sentences. Consequently, language and reading ability are gradually built up together. Because of the laboriousness of the kinaesthetic method, it is immediately discontinued when a student is able to recognize words without tracing.

The wise teacher plans for fun or recreational reading at the earliest possible date. Up to the present moment, reading has been anything but fun for the remedial reader. Therefore, our first concern is making each day's lesson enjoyable. Simple story books with high interest level are scarce. The typed experience story may be placed in a bright folder and read by the student to another interested teacher, a secretary, or taken home in a notebook to be read to his parents. The sooner a student can enjoy reading material outside of his assignments the sooner he begins to grow in reading ability.

The remedial reading teacher must plan for each student to experience confidence and success. A seventh grade student who reads at the second or third reader level has already encountered so much defeat that his confidence in himself is completely gone. The teacher should use every possible opportunity to show a student that he *is* succeeding and that he *is* making progress. This may be accomplished by posting a daily record of the number of pages read, the titles of books or pamphlets read, the number of vocabulary words mastered, and the improvement made in the rate of reading a given selection.

CLINICAL

The clinical reading program of the Compton Union High School District has functioned for two years. Students from the four junior

high schools with superior mental ability but whose reading abilities are from pre-primer to second reader level are enrolled in the clinic where individual instruction is given.

The Reading Clinic

PURPOSE

- A. The clinic is to discover the factors that are causal in the reading deficiencies of the student. Procedures of diagnosis follow the "Reading Clinic Diagnosis Form." (At end of article)
- B. The clinic is to develop and to take curative measures for the individual student based on the causes as determined above.

HOW DOES A STUDENT ENTER THE READING CLINIC

- A. The "Information Blank for Entrance to Reading Clinic" is completed by the counselor or other assigned personnel, and is referred to the director of the Reading Clinic. (At end of article)
- B. A parent interview is conducted. It develops the necessary arrangements for transportation, eye examination, and the cooperation of the parent in helping the child with home assignments.

WHAT OCCURS IN A DAILY PERIOD OF CLINICAL INSTRUCTION

- A. Each student has individual help from a reading clinician an hour a day for two or three days a week.
 1. The clinician is a preteaching student in the 13th or 14th year of junior college.
 2. The clinicians are briefed by the director of the clinic before it opens, and they meet with her in a group for one hour a week for additional help. Clinicians also are given individual attention as they seek it or as the director sees the need of supervision.
- B. The clinician provides five phases of instructional procedure that are outlined and elaborated under the remedial program. She varies it to meet the needs of the individual student.

An Interesting Case From The Reading Clinic Files

Douglas is one of the most interesting students that has entered the clinic. As the psychometrist looked over the test data she found a record of two Binet's administered a year apart. The tests had been given by two different examiners, and the results showed an intelligence quotient of 75 and 68 respectively. Douglas had been enrolled for two years in the Special Training class of the elementary school district and was transferred to the same class upon entering the secondary school district.

In order that we may better understand the capacities and interests of these students in the special training class, the secondary school psychometrist gives another individual intelligence test at her first opportunity. She gave Douglas the Healy Pictorial Completion Test II, and Douglas made a score of 117 I.Q. points.

The psychometrist immediately noted the marked discrepancy between the Binet and the Healy test scores. Since a high score on the Healy requires good reasoning ability, a careful noting of details, and good perception, the psychometrist felt reasonably sure Douglas was at least average in intellectual ability.

An individual Dolch Basic Sight Word Test was next administered. Douglas recognized only twenty-seven of the two hundred and twenty words in the list. Obviously this student was suffering from a severe reading handicap.

An interview with the mother was imperative. In this meeting several important clues to Douglas's difficulty were revealed. The mother of European descent spoke broken English. She had an intelligent appreciation of her son's difficulty. She said that her deceased husband had worked hard and had made a good living, but that he was a stern man. An appointment was scheduled with an optometrist. Douglas's vision was normal. Then followed a very illuminating bit of information from the mother. Douglas had never uttered a word until he was seven. At this time Douglas had an operation to relieve a severe condition of tongue-tie. This physical handicap had caused his family of several brothers and sisters to label him "dumb." When he first entered the clinic, Douglas appeared "dumb." After a few weeks of individual attention where his reading instruction began at his reader level, his whole attitude changed from one of defeat to one of success.

Douglas had earned the right to hold his head high. In approximately one hundred and twenty hours of clinical instruction, he had

progressed from the pre-primer reader level to the fourth reader level.

At the end of this school year the director of the clinic recommended that Douglas be placed in a remedial reading class in the junior high school which he attends. However, all his teachers will be carefully briefed on his reading disability in order that there be no chance of his again becoming discouraged and defeated.

If you consult the Reading Clinic diagnosis form at the end of this article you will note the careful attempt that is made to discover the individual student's assets and liabilities, his interests, his everyday knowledges, his family background, and his personality problems.

On entering the Clinic, an "Alphabet and Sound Test" is given. A few students do not know the names of the letters, nor the phonograms and blends. Instruction is based on these findings.

The Durrell-Sullivan Capacity Test, Intermediate Test, Form A, is administered to measure the student's ability to comprehend the spoken language where no printed symbols are required. We find that the scores on this testing instrument usually support the high intelligence score obtained on Healy No. 2.

The achievement scores are recorded from the group tests. A high score on arithmetic confirms our belief of high native intelligence as obtained from Healy No. 2.

For the most part, the children in the Clinic grow steadily and surely. Good reading is a process of growth over many years. The growth is not phenomenal, but we are correcting specific deficiencies and providing a measure of success to each student. The improvement in attitudes is often more noticeable than the increase in reading ability.

FUNCTIONAL

The functional reading program is one planned to meet the peculiar needs of mentally retarded students in real life situations. It is carried on in the Special Training classes with no more than eighteen in a class.

The teacher understands and appreciates the reading disabilities of the group. She will not attempt to bring them up to a grade level; neither will she water down, ease down, or slow down the regular program. This teacher will try to bring the reader level of each individual student to his mental age by developing interesting stories around real needs; such as marketing, money order forms, menus, and recipes.

A teacher of this group does not necessarily make an experience story every day. Instead, she may utilize printed material such as "My Weekly Reader." Articles on the same topic often occur at all reader levels.

Under the discussion of remedial reading we have included an experience story. Under functional reading we are including a reading lesson that was developed by Miss Sally McMonegal, a teacher in the Compton Union H. S. District, in which she used printed material at different reading levels. She also includes common experiences and discussions which are valuable to groups at any level.

Trip to a Market

I. Introduction

We discovered that for the week of October 17-21, all four issues of "My Weekly Reader" featured articles on food; so interest was created in the discussion of breakfasts.

II. Development of the unit

"My Weekly Reader," Edition No. 1, (grade 1 reading level) featured "Nan and Ted Eat Breakfast." This edition is read by the pre-primer reading group. Before reading we discussed:

1. What each ate for breakfast.
2. Why breakfast is important.
3. How food helps us grow, builds strong bones, teeth, etc.
4. Why we should keep healthy.

The discussion proved so interesting the other two reading groups joined. Everyone looked for pictures of foods eaten at breakfast; these were later used for posters labeled "A Good Breakfast."

"My Weekly Reader," Edition No. 2, (grade 2 reading level) featured an article on corn which followed right along the discussion of breakfast foods since so many are made from corn. We listed as many breakfast foods as we could think of that are made of corn.

"My Weekly Reader," Edition No. 3, (grade 3 reading level) featured an article on milk. We discussed:

1. Why milk is fed to babies.
2. Why it is called a "perfect food."
3. Why children need one quart daily.
4. What kinds of milk do we have.
5. What we mean by pasteurization.

"My Weekly Reader," Edition No. 4, (grade 4 reading level) featured frozen foods. Our discussion centered around:

1. What we mean by a home freezer and store locker.
(Only one of the students knew what a "deep-freeze" was.)
2. What freezing does to foods.

From the article in "My Weekly Reader" we made a list of foods being frozen, namely:

meats	fruit
fish	vegetables
fruit juices	baked goods

We discovered that very few in the class had ever tasted frozen foods, and few had seen the frozen food department. Preceding the trip, we discussed field trip conduct.

III. Activities

- A. Each student personally wrote a note to the principal asking for permission to visit Metrick's Market. The principal personally answered the group.
- B. Each student took a 3"x5" card along to the store on which he wrote the names of frozen foods and breakfast foods he saw. (Most pupils could not read the frozen food labels, but they all knew the cereals.)

- C. On returning home from the trip, we listed the frozen foods under the headings we had found in the newspaper; meats, vegetables, fish, fruit, etc.
- D. The class purchased, prepared, and drank a sample of frozen lemonade.
- E. Each student wrote an experience story of the trip and illustrated it with a picture which he clipped from a magazine. Stories were typed and a class booklet was made.
- F. Posters were made with pictures of foods that would constitute good breakfasts.
- G. A "Breakfast Dictionary" was compiled by listing breakfast foods in alphabetical order:

BREAKFAST DICTIONARY

Directions: List the breakfast foods in alphabetical order:

bacon	meat	bacon	juice
cocoa	salt	bread	meat
milk	pepper	butter	milk
egg	toast	cereal	pepper
sugar	butter	cocoa	roll
jam	cereal	egg	salt
roll	juice	fruit	sugar
bread	fruit	jam	toast

- H. A note of thanks for the trip was written to the principal.

IV. *Achievements in terms of objectives*

- A. Provided meaningful reading and writing experiences closely connected with their lives.
- B. Children actually saw a "deep-freeze."
- C. Children actually saw frozen foods.
- D. Children actually saw breakfast foods in a market.
- E. Children actually tasted frozen fruit juice.
- F. Children actually read food labels.
- G. Children learned what constitutes a good breakfast.

Through the developmental, remedial, clinical, and functional reading program that has just been described, the Compton Union High School District is working toward the elimination of reading retardation. True, we are giving more time to the marked deviates than to the large middle group. This practice, though not ideal, probably stems from necessity. Children with high intelligence and low reading ability become behavior problems of such magnitude that they come to the attention of the administrator and are programmed into the special classes. Our goal is to provide maximum opportunities for all students to learn to read the printed word commensurate with their individual capabilities.

MATERIALS

Dolch Basic Sight Word Test—Garrard Press, Champaign Ill.

Durrell-Sullivan Reading Capacity Test, Intermediate Form A, Grades 3-6, World Book Company.

STANDARDS USED IN GIVING THE DOLCH BASIC SIGHT WORD TEST, INDIVIDUALLY

Following are the standards* which were adhered to in giving and scoring the Dolch Basic Sight Word Test:¹

1. Each child must be tested individually, far enough apart from the others that they cannot hear him pronounce, and that he cannot be disturbed by them.
2. If the child shows fatigue he may be given the test at two sittings.
3. In the case of younger children or children who have had little reading work, the Dolch cards² may be used in place of the test sheets. The cards should be numbered and arranged in the same order as the words on the test. The examiner, however, should

*These standards as well as the limits for the scale given at the end were summarized from the two following studies which arrived at the Scale:

Eckstein, C., *Use of the Dolch Basic Sight Word List as a Measure to Determine Reader Level*, M. A. Thesis, S. U. I. 1944.

Sparrow, J., *Accomplishment on the Dolch Basic Sight Word Test as a Measure of Reader Level*, M. A. Thesis, S. U. I., 1944.

¹Dolch, *Basic Sight Word Test*, Garrard Press, Champaign, Illinois.

²Dolch, E., *Basic Sight Vocabulary Cards*, Garrard Press, Champaign, Ill.

have a copy of the test sheet on which he keeps a record of words missed.

4. If the test sheet is used in place of the cards, a cardboard marker should be used by the child and placed under each row of words as he proceeds. Both the child and the examiner should have copies of the test sheet.
5. Each child is told to say the words he knows. As the correct response is given, the examiner draws a line through the word on his own test sheet, not on the child's. (In case the examiner wishes to make the test serve diagnostic purposes also, he may write in the types of error a child makes as he tries to pronounce each word. The wrong response may just be written above the word attempted. By analyzing these errors later, it is often possible to tell what type of difficulty the child has. However, this recording of type of error has nothing to do with finding the child's reader level.)
6. The time allowed for pronouncing each word should be ten to fifteen seconds. At the end of fifteen seconds the teacher will point to or present the next word. For children who have had no phonics, ten seconds is a long enough time, since at one look a child either knows a word or doesn't know it. Children who have had a little phonics may take a few seconds to sound a word, but the word is counted wrong if they can't get it within fifteen seconds. A conscientious pupil who is disturbed if he can't say every word may be given a little more time, but the answer not counted right if he takes over 15 seconds.
7. These were the criteria upon which a child was given credit for knowing a word:
 - (a) If he could pronounce it at sight.
 - (b) If he could sound it out and then pronounce it on first trial.
 - (c) If he corrected himself immediately after miscalling it and then pronounced it correctly.

8. In no case was a child given credit for knowing a word if any of the following happened:

- (a) If he miscalled it, and then after correctly pronouncing one or several others in the list, came back to that word and gave it correctly.
- (b) If he miscalled it, and gave more than the one original mistaken word before finally getting the right one.
Example: If for the word *could* a child said *called*, *cold*, *could*, he was given no credit.
- (c) If he omitted the word and then later came back and gave it correctly.
- (d) If he hesitated longer than fifteen seconds before giving the word.

The following limits were decided upon for the Dolch Score Scale:

<i>Dolch Words Known</i>	<i>Equivalent Reader Levels</i>
0-75	Pre-primer
76-120	Primer
121-170	First Reader
171-210	Second Reader
Above 210	Third Reader

DOLCH VOCABULARY SCALE

<i>Reader Level</i>	<i>Words Known</i>
PP	0 - 75
P ₁	76 - 85
P ₂	86 - 97
P ₃	98 - 120
1st	121 - 140
1st ₂	141 - 165
1st ₃	166 - 170
2nd	171 - 210
3rd	210 - 220

Reader level determined by number of words known.

READING CLINIC DIAGNOSIS

Name Parents' Name

Date Address

Age School

1. Results of psychological tests:
2. Dolch Basic Sight test:
3. Phonic Inventory:
4. Capacity test:
5. Achievement test:
6. Oral Reading:
7. Spelling & Language:
8. Experiences (home, date, time, address, travel, maps, tracing)
9. Handedness?
Eye dominance?
10. Calendar knowledges: date birthday
 days of week names of months
11. Learning techniques:
 tracing words?
 tracing sounds?
 spells out words?
12. Personal history knowledges: own name address
 mother's name father's name
 knowledge of brothers and sisters
13. School date: grade? What do?
 Evidence of pressure?
14. Outside interests?
15. Personality: sensitive insecure non-fluent
 resentful study habits appearance
 fatigues easily?
16. Conference with parents: general impression
 attitude toward case: over-anxiety? etc.

17. Recommendations: clinic? special room?
 special tutor? more interest reading? etc.

Examiner

Compton Union High School Dist.
District Reading Clinic
November 3, 1950

INFORMATION BLANK FOR ENTRANCE TO READING
CLINIC

Child's Name Grade Age

..... School

Parents' Name Address

Brothers and sisters (give age and grade of each one):

1..... 3.....

2..... 4.....

Tell us anything you can about the following:

- A. Child's Physical Condition:
- B. Child's Progress in School:
- C. Child's Vision and Hearing:
- D. Child's Personality:
- E. Reason for Referral to Reading Clinic:

Aural Reading: Developing Communication Skills for Deaf and Hard-of-Hearing Children

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My interest in reading is primarily focused on the reading problems of children who do not hear normally, and it is with such problems that my remarks will be concerned. But before one can view adequately such a specific matter as the reading of the deaf and hard-of-hearing, one needs to have a clear picture of their language development in general, and indeed, of the entire educational program in which they are developing. It is with this in mind that I give you a description of the background of the educational program for acoustically handicapped children in Compton, the program with which I am most familiar.

1943 was indeed a good year for deaf and hard-of-hearing, as well as other handicapped children in the State of California. In that year, legislation was enacted directing the State Department of Public Health and Education to develop a state-wide program of hearing conservation and of education for acoustically handicapped children, and providing an appropriation for this purpose.

The five communities of Compton, Enterprise, Paramount, Lynwood, and Willowbrook responded to this legislation by cooperatively developing programs to meet the medical and educational needs of three groups of handicapped children, namely, those afflicted with cerebral palsy, the partially sighted, and the deaf and hard-of-hearing. Paramount provided for the first group, Enterprise for the visually handicapped, and Compton for the deaf and hard-of-hearing. Handicapped children from these communities attend one of the three centers indicated, on a pupil exchange basis, and are transported to and from school by public taxis, cost of which is assumed by the schools.

After giving much thought and discussion to the type of educational setup to be established in Compton, those concerned came to the conclusion that perhaps there were means of providing for deaf children other than the traditional way of setting them apart in schools

for the deaf. Consequently, in 1948, a program which placed deaf and hard-of-hearing children into the educational environment of children with normal hearing, was started in Compton.

The fundamental basis upon which our decisions rested were:

1. Segregation of acoustically handicapped children seemed incompatible with the psychological principles of living and learning as we know them today.
2. It seemed probable that acoustically handicapped children might have much to gain in the way of emotional enrichment, desirable behavior patterns, and most particularly, motivation for verbal communication by close and continuous association with hearing children.
3. A non-segregated environment did not seem to preclude the possibility of providing special equipment, personnel, and methodology such as is provided in a segregated school for the deaf.
4. Since deaf and hard-of-hearing children live in a world of persons who hear and speak, it seemed likely that it would be advantageous if their adjustment to such an environment commenced as early as possible during their impressionable learning years.
5. It was felt that the traditional method of segregation might be but a continuation of a method evolved in the distant past when handicapped persons were socially unacceptable and therefore segregated, if not kept in concealment.
6. Non-handicapped children can profit from the association with those not so fortunate. This is mutually beneficial to both groups.

As a result of this sort of thinking, all deaf and hard-of-hearing children are placed into regular classrooms of children with normal hearing at the Janie P. Abbott School in Compton. This is a regular hearing school of approximately five to six hundred children. During the three years in which the program has been in existence there, the distribution of the deaf children has been approximately as follows:

Kindergarten 12, first grade 10, second grade 2, third grade 1, sixth grade 2.

It will be noted that the greatest concentration of children is in the kindergarten and the first grade levels. This distribution will probably change now that parents of deaf children know that they do not have to move to other communities to find proper educational facilities.

The twelve hypacusic kindergarten children are divided into two groups. Each group is assigned to a regular kindergarten room of normally hearing children, in a morning and afternoon session. In each session there are two teachers: one, a regular kindergarten teacher, the other a special teacher experienced in working with the deaf. The special teacher assists the deaf children in their adjustment to classroom activities and routine, and takes advantage of practical situations to stimulate speech production, language understanding and speech reading. Inasmuch as it is possible, the regular and special teachers work as a team while the two are in the classroom together, in order not to separate the two groups of children. The special teacher in addition takes the deaf and hard-of-hearing children individually or in groups for supplementary training. This is done in a special room equipped with group hearing aids, and other instructional aids designed for the deaf. A similar plan is followed in the case of the first grade children. Beyond the first grade, deaf children are placed in regular classrooms corresponding with their approximate age and maturity. Since the distribution of deaf children in these grades has been at a minimum, and because they are older and better adjusted to classroom routine, a special teacher does not remain with them in the regular classroom. Instead the hypacusics are scheduled to come to her for their special instruction. Wherever possible, the special instruction is geared to the individual needs of each child. Consequently, the length of the periods for each group or individual varies as the needs dictate.

To the degree to which it has been within our means to do so, the deaf and hard-of-hearing children are identified with the hearing children. On arrival in the morning, they all go to their respective hearing classrooms. Recesses, physical education, lunch, and any other special activities are not interfered with by scheduling special instruction at those times. Where possible, special instruction is arranged at those times when it is most advantageous for them to be out of the regular classroom. The deaf and hard-of-hearing children are having approximately the same school experiences as hearing children. Many hard-of-hearing children belong to the school Glee Club; profoundly deaf boys play the drums in the school band; others participate in Cub Scouts and Blue Birds with hearing children. Experiences which enrich the life of the hearing child are also experiences shared by the deaf children. It is hoped that this will have a positive effect on the entire learning process of the deaf child.

There appears to be complete acceptance on the part of the hearing children for those who do not hear. They show a wholesome curiosity regarding the problems faced by the deaf children. Questions such as the following are asked and discussed innumerable times: "Why can't he talk?" "Why is he deaf?" "How does he understand what you are saying?" Sympathetic understanding of the needs of the deaf children is manifested by the hearing children by such expressions as; "I want to teach him how to talk"; "Can I teach them how to read lips?"; "When I grow up, I am going to be a teacher of the deaf."

Now let us look a little more closely at the children and the educational problems which deafness presents to them. First of all, I want you to think with me, and mentally review the development of the communication skills of a child with normal hearing, up to and including his experience in kindergarten. From early infancy he babbles, spontaneously. Very early he responds to the sound of voices, his own and others. He makes association between the auditory stimulus when someone speaks, and a given object, event, or person. Soon he begins to manipulate his own vocal mechanism to produce similar appropriate vocal symbols for events, objects, or persons. By the time he is approximately two years of age, he is talking considerably. Moreover, he has heard a vast amount of conversation, much of it over and over again. His understanding of language through hearing and association exceeds by far his ability to verbalize. By the time he is of kindergarten age, he has a vast background of experiences which he can interpret with the spoken word. The kindergarten enriches his living experiences; motivates further need for verbal expression; and provides opportunities for self-expression. The hearing child with a background of living experiences has a relatively easy transition to make to reading. Another symbol, the visual, is emphasized to interpret the many things he now understands through actual experience, through listening, associating, and talking. Perhaps it can be said that he has a good foundation for reading.

By contrast, the deaf child enters kindergarten having had the following experience with communication. As far as we can tell, from talking to parents of deaf children, their handicapped children go through the stage of spontaneous babbling comparable to that of the hearing child. Unfortunately, however, when this stops, normal speech and language development does not take its place. The deaf child does not respond to the sound of the voice of others or his own and become motivated to produce alike combinations of sound effects; and he

makes no association between what is said and a given event, person, or object. Deafness precludes these normal developments. His deafness, not only prevents normal development of spoken symbols, but also acts as a deterrent to his understanding of the meaning of language. The deaf child, then, on entering kindergarten seems to be closest to the infant in the babbling stage in terms of experience with the communication symbols, except that by the time he enters kindergarten he has usually ceased even to babble. There is, in addition, a void in terms of understanding of language which communication symbols have given the hearing child.

Now, let us follow this deaf child into the kindergarten and examine what it is that he needs in order to develop some facility for expressing himself, for understanding others, and for reading.

First of all, he has to substitute for the auditory impression which the hearing child receives. Consequently, from the day he enters kindergarten, association between lip movements and objects, persons, and activities commences. He is learning lip movements have meaning. He is likewise encouraged to imitate lip movements and to express himself vocally. He is helped to see how others respond to speech, to sounds, to noises. He is helped to discover that people respond to his own attempts at vocalization, in order to make speech purposeful to him. It is apparent that this child is far behind the hearing child of comparable age, and will probably never "catch up" to him. But he can gradually develop understanding of language through association different from that made by the hearing child, namely, by associating lip movements with objects, persons, or events.

Lip movements are difficult to discriminate since many sounds and words look alike on the lips. Other sounds and words are entirely imperceptible. The child must therefore, consciously direct his attention to the face and lips, in contrast to the seemingly effortless manner in which the hearing child learns to talk and understand language. Much is grasped through context. It is for these reasons that the deaf child is presented with the visual symbol for words and sentences which express his experiences, much earlier than is the hearing child. The written symbol provides another means of reinforcing the association being made, and is perhaps, less difficult to learn than the fleeting and often imperceptible symbols on the lips.

The teacher is forever on the alert to express the child's own experiences for him, since at this time, he has no facility for so doing. She expresses them for him by repeating them and by encouraging

him to watch her lips. "You are playing with a truck." Other experiences may be expressed by drawing, dramatizing, or by writing them clearly in simple sentences. Soon the children attempt to express themselves in one manner or another,—the spoken word—through drawings or dramatization. They may hunt for a picture which expresses what they want to tell you. By the time they are in the first grade, they are beginning to express themselves freely in writing. Simultaneously, of course, they are reading what they write. They continue to draw pictures when necessary. The teacher supplies the corresponding language that goes with them.

For example, a boy came to school one Monday very excited about some weekend event. I was totally unable to understand anything he wanted to tell me. I sent him to the blackboard and directed him to draw what he was thinking. He drew, with meticulous detail, a merry-go-round, complete with the entire circle of persons on horses. Then he pointed to the figure representing himself. There was no doubt in my mind that he had gone on a merry-go-round. I wrote, "I went on the merry-go-round," associating "I" with the child. Another example. A teacher takes her children for a walk. On their return she says and writes, "We went for a walk." "We saw a brown dog." By repeating this or similar experiences, the children gradually assimilate the meaning of such verbs as "went" and "saw." They are also learning to say, "We went for a walk." Long before they can master the spoken skill, and recall words in their correct sequence, to express a thought accurately, they can write, read, and lipread such sentences.

As a body of language understanding is slowly built in this manner, the children are motivated to bring material to you for discussion and expression: a picnic . . . a brother or sister . . . a new toy . . . Though reading is not the primary concern at this time, it is obvious that while the child is simultaneously developing an understanding of language, speech reading skill, speech, and reading readiness, he is also learning to recognize many words and sentences.

I need not tell you that the process is arduous, slow and never ending, and at best presents many difficulties for the deaf child. I need only give you an example to illustrate this. A boy of eight was very excited because his mother was coming to school in a few days. He conveyed this idea to me by saying "mother" in a manner understandable to me, and by making a gesture for "come"! On the blackboard I wrote, "Mother will come to school." After a few daily repetitions, he was able to go to the board and write this himself. Mother

finally came. The boy rushed to the board and wrote "Mother will come to school." At this point, I was required to confuse him by changing the sentence he had mastered to "Mother came to school." Another incident illustrates again the innumerable possibilities for wrong associations, and therefore the tremendous task faced by the deaf child. A teacher took her children for daily walks. They learned to write a few sentences around this experience. One day, they saw a long stemmed flower waving in the wind. A little boy drew this experience on the blackboard. The teacher wrote, "The flower was waving its stem." Subsequently the group went out for a walk again. This time they saw a dog wagging his tail. The same little boy returned, drew a picture of his experiences and wrote, "We went for a walk. We saw a dog. The dog was waving his stem."

As a result of developing language understanding in this manner, that is, simultaneously using the written symbol with speech reading at an early age, the deaf child entering the first grade recognizes many written words. They recognize many words outside of the prescribed readers. They do not seem to have much difficulty keeping pace with the hearing first graders, in terms of word recognition and understanding meanings of reading material on this level. However they are older and have spent approximately two years in kindergarten, and will spend two years in first grade. We have found also that the deaf kindergarten children achieve a degree of printed word reading readiness ability comparable to hearing children. This is shown by test results given to six deaf kindergarten children last month. They did not take the first part of the test, since lipreading the directions was beyond the limitations of their understanding of language. The test given was the "First Year Reading Readiness Test," used with the Alice and Jerry Basic Readers. The Manual of Instruction states:

"Part II provides situations which indicate the extent to which pupils can manipulate the symbols with which they will be confronted in formal reading." The age range of the hearing children at the time the test was given was five and a half to six years; that of the deaf children was five years and five months to seven years and seven months. The results scored by the hearing children are as follows:

2 made scores between 26 and 32 — very high

35 made scores between 15 and 25 — average

6 made scores between 7 and 14 — low

The results obtained by the deaf children are as follows:

1 made score of 33 — very high

1 made score of 27 — high

4 made scores of 22 to 25 — average

The score of 33 was made by a deaf child of six years who had spent two years in kindergarten. Four deaf children were entirely too immature to take any part of the test. Three of these are completing their first year in kindergarten, one his second year.

On the higher levels, it also seems that the deaf child is exceeded by the hearing group by approximately two years. One deaf child in the second grade was given the Lee-Clark Reading Readiness Test, Primary Form with the hearing group. Actual grade placement of the class at the time of the test was two. This child's placement on the basis of her test score was also two. Five hearing children exceeded her, thirty hearing children scored lower. The deaf child is approximately two and a half years older than the rest of the group.

A deaf boy in the sixth grade was given the Progressive Achievement Test with the hearing group of sixth graders. The actual grade placement of the class at the time of the test was 6.1. The grade placement of the deaf boy on the basis of the results obtained was 5.3. Twenty-six children exceeded him. Eleven children scored lower than he did. Again I want to point out that this boy was approximately a year and a half older than the other members of the hearing group, at the time the test was given.

Deaf children cannot be expected to compete on the academic level with hearing children. This is not the goal for hypacusic children placed with hearing children in the Compton program. Consequently such pressures are not exerted. It is, however, made possible for the deaf children to participate with hearing children in class exercises to the maximum degree to which their handicap allows. It is hoped that this close and continuous association with hearing children will facilitate more normal social adjustment and learning. It is interesting to note, on the basis of the limited test results obtained that the deaf children compare favorably with the hearing children, but in all cases are approximately two years older. I might add that the deaf children are placed with the hearing group with which they seem closest in terms of social maturity and that they have appeared well integrated with the group though they are two years older.

The program in Compton is too young to evaluate with any degree of accuracy. As a whole, it is without precedent and has not been tested by sufficient time. There is much to be learned, and more questions have been raised than answered. Only time, observation, and experience will answer them. In conclusion I should like to say however, that the results up to now are most encouraging.

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